Service
Service
Service

190C6FS/00
190C6FS/93
190C6FS/78
190C6FS/96

ENERGY STAR

Service Information

Horizontal frequencies
30 - 83 KHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING.

REFER TO BACK COVER FOR IMPORTANT SAFETY GUIDELINES

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飞利浦 PHILIPS PHILIPS

PHILIPS

HUDSON-6 190C6
GENERAL PRODUCT
SPECIFICATION

. ANALOG INPUT

. AUTO PICTURE ADJUSTMENT

. 15 FACTORY PRESET MODES AND 34 PRESET MODES WHICH CAN BE RECOVERED TO PRESET MODES

. NEW OSD STYLING DISPLAY FOR MODE IDENTIFICATION /ADJUSTMENT

. DDC 2B & DDC/CI COMMUNICATION CAPABILITY

. MAX. RESOLUTION 1280*1024 NON-INTERLACED AT 76 HZ

. 19" COLOR TFT LCD FLAT PANEL

. EASY TILT & FOLDABLE BASE

. FULL RANGE POWER SUPPLY 90 - 264 VAC

. CE ENVIRONMENTAL POLICY

. LEAD-FREE PRODUCT POLICY

. ANTI-GLARE TO REDUCE LIGHT REFLECTION

. POWER MANAGEMENT CAPABILITY

. SOG SUPPORT

. TCO'99

. WALL MOUNT KIT (OPTION)

. PROTECTIVE COVER (OPTION)

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PHILIPS

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CLASS NO.

19 inch TFT-LCD Monitor
TYPE : 190C6FS/00
BRAND : PHILIPS

8639 000 16451

2005-07-01

NAME	Peter V.	SUPERS.	15	590 — 2	10	A4
TY	CHECK	DATE 2005-07-01	Property of PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.-B.E.			

GENERAL PRODUCT SPECIFICATION(Continued)

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PHILIPS

1.0 FOREWORD

This specification describes a 19" SXGA multi-scan color TFT-LCD monitor with maximum resolution up to 1280*1024 /76 Hz non-interlaced.

2.0 PRODUCT PROFILE

This display monitor unit is a color display monitor enclosed in PHILIPS global styling cabinet, which has a foldable base with easy tilt and good stability.

2.1 LCD

2.1.1

Type NR.	: LM190E03-TL
Number of Pixels.	: 1280 (H) x1024 (V)
Physical Size.	: 396.0(w)*324.0(h)*16.5(d) mm
Pixel Pitch.	: 0.294 mm x 0.294 mm
Color pixel arrangement.	: RGB vertical stripes
Support Color.	: 16.2M colors
Display Mode.	: Normally White
Backlight.	: CCFL edge light system
Active area. (WXH).	: 376.32 x 301.06mm (19" diagonal)
Viewing Angle (CR>=10).	: Vertical 140 degree, Horizontal 140 degree (Typ.)
Contrast ratio.	: 700:1
White luminance.	: 300nits (Typ.)

2.1.2

Type NR.	: QD19EL0101
Number of Pixels.	: 1280 (H) x1024 (V)
Physical Size.	: 396.0(w)*324.0(h)*17.0(d) mm
Pixel Pitch.	: 0.294 mm x 0.294 mm
Color pixel arrangement.	: RGB vertical stripes
Support Color.	: 16.2M colors
Display Mode.	: Normally White
Backlight.	: CCFL edge light system
Active area. (WXH).	: 376.32 x 301.06 mm (19" diagonal)
Viewing Angle (CR>=10).	: Vertical 140 degree, Horizontal 125 degree (Typ.)
Contrast ratio.	: 600:1
White luminance.	: 270nits (Typ.)

2.2 Scanning frequencies

H-Frequency.	: 30K - 83 KHz
V-Frequency.	: 56 - 76 Hz
2.3 Video dot rate.	: < 140 MHz
2.4 Power input.	: 90-264 V AC, 50/60 ± 2 Hz
2.5 Power consumption.	: < 40 W maximum
2.6 Dimensions.	: 442(W) * 420(H) * 201(D) mm (Inc. Pedestal)
2.7 Weight.	: 5.3 kg

2.8 Functions:

(1) D-Sub analog R/G/B separate inputs, H/V sync separated, Composite (H+V) TTL level, SOG sync.

2.9 Ambient temperature: 5 °C - 40 °C

2.10 Regulatory compliance:

Safety	B, CCIB / CCEE(China), CE(Europe), CSA(Canada), DEMKO(Nordic), EZU(Czech), FIMKO(Nordic), Gost(Russia), IEC 950 CB Report, NOM NYCE(Mexico), PSB(Singapore), SEMKO(Nordic),SISIR CPA(Singapore), TUV(Germany), UL(USA), * UL2601-1(NAFTA), EN60601(EU) and IEC60601-1(WW)
EMI	C-tick, CE(Europe), FCC(USA), IC(Canada), VCCI(Japan),BSMI, *IEC60601-1-2 (EU)
Ergonomics	E2000, MPRII(Sweden), Nutek(Sweden), TCO99, TUV/GS, TUV/ERG, EPA, ISO13406-2
Compatibility	PC2001, Windows 2000, Windows 98/Me, Windows XP, NSTL

- Medical compliance only applies for dedicated models.

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3.0 Electrical characteristics

3.1 Interface signals

1). D-shell Analog

Input signal : Video, H-sync, V-sync,

Video : 0.7 V p-p, input impedance, 75 ohm

Sync. : Separate sync TTL level, input impedance 2k2 ohm terminate

H-sync Positive/Negative

V-sync Positive/Negative

Composite sync TTL level, input impedance 2k2 ohm terminate (Positive/Negative)

Sync on green video 0.3V p-p Negative. (Video 0.7 V p-p Positive)

3.2 Interface

3.2.1 D-Sub Cable

Length. : 1.8 M +/- 50 mm

Connector type. : D-Sub male with DDC-2B pin assignments.
Blue connector thumb-operated jackscrews

Pin Assignment:

PIN No.	SIGNAL
1	Red video input
2	Green video input / sync on green
3	Blue video input
4	GND
5	GND- Cable detect
6	Red video GND
7	Green video GND
8	Blue video GND
9	DDC +3.3V or +5V
10	Logic GND
11	GND
12	Serial data line (SDA)
13	H-sync / H+V
14	V-sync
15	Data clock line (SCL)

3.2.2 Software control functions via OSD/control

OSD (On Screen Display) function
Adjustable functions:

1. Main Menu	2.1 Sub Menu	2.2 Sub Menu 2
MONITOR SETUP		
Exit		
Brightness & Contrast	Brightness, Contrast	
Color	Original Color, 9300K,6500K, sRGB	
	User Define	Red, Green, Blue
Position	Horizontal, Vertical	

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More Settings	Language	English, Spanish, French, German, Italian, S. Chinese
	Phase/ Clock	Phase, Clock
	OSD Setting	Horizontal, Vertical
Reset	No, Yes	
Serial No.:		
(Serial No.)		
(Timing Mode)		
Move Selection Then ok		

Remark: Reset - No: Exit
Yes: Auto adjustment for displaying timing mode and recall factory preset

3.3 Timing requirement

3.3.1 Mode storing capacity

(1) Factory preset modes. : 15
(2) Preset modes. : 34

3.3.2 Factory/ Preset timings

The factory settings of size and centering are according to the reference timing charts(See as below)

MODE NO.	1	2	3	4
RESOLUTION	640 x 350	720 x 400	640 x 480	640 x 480
Dot clock(MHz)	25.175	28.321	25.175	30.24
f h	31.469kHz	31.468kHz	31.5kHz	35 kHz
A (us)	31.778(800 dots)	31.78(900dots)	31.778(800 dots)	28.571 (864 dots)
B (us)	3.813(96 dots)	3.813(108dots)	3.813(96 dots)	2.116 (64 dots)
C (us)	1.907(48 dots)	1.907(54dots)	1.907(48 dots)	3.175(96 dots)
D (us)	25.422(640 dots)	25.42(720dots)	25.422(640 dots)	21.164(640 dots)
E (us)	0.636(16 dots)	0.636(18dots)	0.636(16 dots)	2.116(64 dots)
f v	70Hz(70.09)	70Hz(70.085)	60Hz	67Hz
O (ms)	14.27(449 lines)	14.27(449 lines)	16.683 (525lines)	15 (525 lines)
P (ms)	0.064(2 lines)	0.064(2 lines)	0.064 (2 lines)	0.086(3 lines)
Q (ms)	1.907(60 lines)	1.112(34 lines)	1.049 (33 lines)	1.114(39 lines)
R (ms)	11.12(350 lines)	12.71(400 lines)	15.253 (480lines)	13.714(480 lines)
S (ms)	1.175(37 lines)	0.381(13 lines)	0.317 (10 line)	0.086(3 line)
SYNC. H/V POLARITY	+/-	-/+	- / -	- / -
SEP . SYNC	Y	Y	Y	Y

MODE NO.	5	6	7	8
RESOLUTION	640 x 480	640 x 480	640x480	800 x 600
Dot clock(MHz)	31.500	31.501	36	36
f h	37.861kHz	37.5kHz	36kHz	35.2kHz
A (us)	26.413(832 dots)	26.667 (840 dots)	23.111 (832 dots)	28.444(1024dots)
B (us)	1.270(40 dots)	2.032 (54 dots)	1.556 (56 dots)	2.000 (72 dots)
C (us)	3.810(120 dots)	3.81 (120 dots)	2.222 (80 dots)	3.556 (128 dots)
D (us)	20.317(640 dots)	20.317 (640 dots)	17.778 (640 dots)	22.222(800 dots)
E (us)	1.016(32 dots)	0.508 (26 dots)	1.555 (56 dots)	0.666 (24 dots)
f v	72.809Hz	75Hz	85Hz	56Hz
O (ms)	13.735(520 lines)	13.333(500lines)	11.763(509lines)	17.778(625 lines)
P (ms)	0.079(3 lines)	0.08 (3 lines)	0.069 (3 lines)	0.057 (2 lines)
Q (ms)	0.528(20 lines)	0.427 (16 lines)	0.578 (25 lines)	0.626 (22 lines)
R (ms)	12.678(480 lines)	12.8 (480 lines)	11.093(480lines)	17.066(600 lines)
S (ms)	0.45(17 lines)	0.026 (1 lines)	0.023 (1 lines)	0.029(1 line)
SYNC. H/V POLARITY	-/-	- / -	-/-	+ / +
SEP . SYNC	Y	Y	Y	Y

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MODE NO.	9	10	11	12
RESOLUTION	800 x 600	800 x 600	800 x 600	800 x 600
Dot clock(MHz)	40	50	49.498	56.251
f h	37.9kHz	48.077kHz	46.9kHz	53.7kHz
A (us)	26.4 (1056 dots)	20.80 (1040dots)	21.333(1056dots)	18.631(1048 dots)
B (us)	3.2 (128 dots)	2.400 (120 dots)	1.616 (80 dots)	1.138 (64 dots)
C (us)	2.2 (88 dots)	1.280 (64 dots)	3.232 (160 dots)	2.702 (152 dots)
D (us)	20 (800 dots)	16.00 (800 dots)	16.162 (800 dots)	14.222 (800 dots)
E (us)	1 (40 dots)	1.120 (56 dots)	0.323 (16 dots)	0.569 (32 dots)
f v	60Hz	72Hz (72.188)	75Hz	85Hz
O (ms)	16.579(628 lines)	13.85 (666 lines)	13.333(625 lines)	11.756(631 lines)
P (ms)	0.106 (4 lines)	0.125 (6 lines)	0.064 (3 lines)	0.056 (3 lines)
Q (ms)	0.607 (23 lines)	0.478 (23 lines)	0.448 (21 lines)	0.503 (27 lines)
R (ms)	15.84 (600lines)	12.48 (600 lines)	12.8 (600 lines)	11.179 (600 lines)
S (ms)	0.026 (1 line)	0.770 (37 line)	0.021 (1 line)	0.018 (1 lines)
SYNC. H/V POLARITY	+ / +	+ / +	+ / +	+ / +
SEP . SYNC	Y	Y	Y	Y

MODE NO.	13	14	15	16
RESOLUTION	832 x 624	1024 x 768	1024 x 768	1024 x 768
Dot clock(MHz)	57.28	65	75	78.75
f h	49.7kHz	48.363kHz	56.5kHz	60kHz
A (us)	20.11(1152 dots)	20.677(1344dots)	17.707(1328dots)	16.66 (1312dots)
B (us)	1.117(64 dots)	2.092(136 dots)	1.813(136 dots)	1.219 (96 dots)
C (us)	3.91(224 dots)	2.462(160 dots)	1.920(144 dots)	2.235 (176 dots)
D (us)	14.52(832 dots)	15.754(1024dots)	13.653(1024dots)	13.003 (1024 dots)
E (us)	0.563(32 dots)	0.369(24 dots)	0.321 (24 dots)	0.203 (16 dots)
f v	75Hz	60.004Hz	70.004Hz	75Hz (75.000)
O (ms)	13.41(667 lines)	16.666(806 lines)	14.272(806 lines)	13.328 (800 lines)
P (ms)	0.06(3 lines)	0.124(6 lines)	0.106(6 lines)	0.05(3 lines)
Q (ms)	0.784(39 lines)	0.600(29 lines)	0.514(29 lines)	0.446 (28 lines)
R (ms)	12.55(624 lines)	15.880(768 lines)	13.599(768 lines)	12.80 (768 lines)
S (ms)	0.016(1 lines)	0.062(3 lines)	0.053(3 lines)	0.017 (1 line)
SYNC. H/V POLARITY	+/+	- / -	-/-	+ / +
SEP . SYNC	Y	Y	Y	Y

MODE NO.	17	18	19	20
RESOLUTION	1024 x 768	1024 x 768	1152 x 864	1152 x 864
Dot clock(MHz)	83.096	94.5	79.9	94.5
f h	61.1kHz	68.7kHz	54.0kHz	63.9kHz
A (us)	16.367(1360dots)	14.561(1376dots)	18.523(1480dots)	15.661(1480 dots)
B (us)	1.348 (112 dots)	1.016 (96 dots)	1.952(156 dots)	1.016(96 dots)
C (us)	2.022 (168 dots)	2.201 (208 dots)	1.352(108 dots)	1.116(105 dots)
D (us)	12.323(1024dots)	10.836(1024dots)	14.418(1152dots)	12.19(1152 dots)
E (us)	0.674(56 dots)	0.508 (48 dots)	0.801(64 dots)	1.339(127 dots)
f v	76Hz	85Hz	60Hz	70Hz
O (ms)	13.142(803 lines)	11.765(808 lines)	16.671(900lines)	14.283(912lines)
P (ms)	0.049 (3 lines)	0.044 (3 lines)	0.148(8 lines)	0.047(3lines)
Q (ms)	0.507 (31 lines)	0.524 (36 lines)	0.445(24 lines)	0.689(44 lines)
R (ms)	12.57 (768 lines)	11.183 (768lines)	16.004(864 lines)	13.531(864 lines)
S (ms)	0.016 (1 line)	0.014 (1 line)	0.074(4 lines)	0.016(1 lines)
SYNC. H/V POLARITY	+ / +	+ / +	+/+	+/+
SEP . SYNC	Y	Y	Y	Y

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CLASS NO.

2005-07-01

19 inch TFT-LCD Monitor
TYPE : 190C6FS/00
BRAND : PHILIPS

8639 000 16451

NAME Peter V. | SUPERS. | 15 | 590 — 6 | 10 | A4

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GENERAL PRODUCT SPECIFICATION(Continued)

Go to cover page

MODE NO.	21	22	23	24
RESOLUTION	1152 x 864	1152 x 870	1152 x 900	1152 x 900
Dot clock(MHz)	108	100	94.5	108
f h	67.5kHz	68.7kHz	61.8kHz	71.8kHz
A (us)	14.815(1600dots)	14.56 (1456 dots)	16.169(1528dots)	13.926 (1054dots)
B (us)	1.185 (128 dots)	1.28 (128 dots)	1.354 (128 dots)	1.185 (128 dots)
C (us)	2.37 (256 dots)	1.44(144 dots)	2.201 (208 dots)	1.778 (192 dots)
D (us)	10.667(1152dots)	11.52 (1152 dots)	12.19 (1152 dots)	10.667 (1152 dots)
E (us)	0.593 (64 dots)	0.32 (32 dots)	0.424 (40 dots)	0.296 (32 dots)
f v	75Hz	75Hz	66Hz	76Hz
O (ms)	13.333 (900lines)	13.333 (916lines)	15.151 (937lines)	13.132 (943 lines)
P (ms)	0.044 (3 lines)	0.044 (3 lines)	0.065 (4 lines)	0.111 (8 lines)
Q (ms)	0.474 (32 lines)	0.568(39 lines)	0.501 (31 lines)	0.46 (33 lines)
R (ms)	12.8 (864 lines)	12.678 (870lines)	14.552 (900lines)	12.533 (900 lines)
S (ms)	0.015 (1 lines)	0.043 (4 line)	0.033 (2 line)	0.028 (2 lines)
SYNC. H/V POLARITY	- / -	- / -	Serr-	+ / +
SEP . SYNC	Y	Y	Y	Y

MODE NO.	25	26	27	28
RESOLUTION	1280 x 960	1280 x 960	1280 x 1024	1280 x 1024
Dot clock(MHz)	108	129.895	108	117
f h	60kHz	75kHz	64kHz	71.7kHz
A (us)	16.667(1800dots)	13.307(1728dots)	15.63 (1688 dots)	13.949 (1632 dots)
B (us)	1.037(112 dots)	1.047 (136 dots)	1.037 (112 dots)	0.957 (112 dots)
C (us)	2.889(312 dots)	1.725 (224 dots)	2.296 (248 dots)	1.915 (224 dots)
D (us)	11.852(1280dots)	9.857 (1280 dots)	11.852(1280dots)	10.94 (1280 dots)
E (us)	0.889(96 dots)	0.678 (88 dots)	0.445 (48 dots)	0.137 (16 dots)
f v	60Hz	75Hz	60Hz	67Hz
O (ms)	16.667(1000 lines)	13.333(1002 lines)	16.661(1066 lines)	14.883 (1067lines)
P (ms)	0.05(3 lines)	0.039 (3 lines)	0.047 (3 lines)	0.112 (8 lines)
Q (ms)	0.600(36 lines)	0.48 (36 lines)	0.594 (38 lines)	0.46 (33 lines)
R (ms)	16(960 lines)	12.774 (960 lines)	16.005(1024 lines)	14.283 (1024 lines)
S (ms)	0.017(1 lines)	0.04 (3 lines)	0.015 (1 line)	0.028 (2 lines)
SYNC. H/V POLARITY	+/+	+ / +	+ / +	+ / +
SEP . SYNC	Y	Y	Y	Y

MODE NO.	29	30	31	32
RESOLUTION	1280 x 1024	1280 x 1024	1280 x 1024	688 x 556
Dot clock(MHz)	130.223	135	138.008	27
F h	76kHz	80kHz	81.1kHz	31.25kHz
A (us)	13.158 (1712 dots)	12.504(1688 dots)	12.326 (1664 dots)	32 (864 dots)
B (us)	1.024 (133 dots)	1.067(144 dots)	0.474 (64 dots)	3.852 (104 dots)
C (us)	1.905 (248 dots)	1.837(248 dots)	2.133 (288 dots)	1.778 (48 dots)
D (us)	9.83 (1280 dots)	9.481(1280 dots)	9.481 (1280 dots)	25.481 (688 dots)
E (us)	0.399(51 dots)	0.119(16 dots)	0.238 (32 dots)	0.889 (24 dots)
F v	72Hz	75Hz	76Hz	50Hz
O (ms)	14 (1064 lines)	13.329(1066 lines)	13.139(1066 lines)	20 (625 lines)
P (ms)	0.02 (2 lines)	0.038(3 lines)	0.099 (8 lines)	0.128 (4 lines)
Q (ms)	0.5 (38 lines)	0.475(38 lines)	0.394 (32 lines)	1.408 (44 lines)
R (ms)	13.468(1024 lines)	12.804(1024 lines)	12.622(1024 lines)	17.972 (556 lines)
S (ms)	0.012 (0 line)	0.012 (1 line)	0.024(2 lines)	0.672 (21 lines)
SYNC. H/V POLARITY	+ / +	+/+	- / -	-/ +
SEP . SYNC	Y	Y	Y	Y

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CLASS NO.

19 inch TFT-LCD Monitor
TYPE : 190C6FS/00
BRAND : PHILIPS

8639 000 16451

2005-07-01

NAME Peter V. | SUPERS. | 15 | 590 — 7 | 10 | A4

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2838 100 05424

MODE NO.	33	34		
RESOLUTION	960X720	960X720		
Dot clock(MHz)	57.58	72.42		
F h A (us) B (us) C (us) D (us) E (us)	44.76kHz 22.34(1286 dots) 1.72(99 dots) 2.58(148 dots) 16.67(960 dots) 0.856(49 dots)	56.4kHz 17.73(1284 dots) 1.44(104 dots) 2.21(160 dots) 13.256(960 dots) 0.780(56 dots)		
F v O (ms) P (ms) Q (ms) R (ms) S (ms)	60Hz 16.667(746 lines) 0.067(2.9 lines) 0.495(22 lines) 16.081(720 lines) 0.0228(1 lines)	75Hz 13.333(752 lines) 0.053(3 lines) 0.5(28 lines) 12.766(720 lines) 0.0184(1 lines)		
SYNC. H/V POLARITY	-/ +	-/ +		
SEP . SYNC	Y	Y		

A	: H-Total	O	: V-Total
B	: H- Sync width	P	: V- Sync width
C	: H- Back porch	Q	: V- Back porch
D	: H- Video width	R	: V- Video width
E	: H- Front porch	S	: V- Front porch

3.3.3 Horizontal scanning

Sync polarity. : Positive or Negative
Scanning frequency. : 30 - 83 KHz

3.3.4 Vertical scanning

Sync polarity. : Positive or Negative
Scanning frequency. : 56 - 76 Hz

3.4 Power input connection

Power-cord length. : 1.8 M
Power-cord type. : 3 leads power cord with protective earth plug.

3.5 Power management

The power consumption and the status indication of the set with power management function are as below:

Status	H-sync	V-sync	Video	Power	LED
On	On	On	Active	<40W	Green
Stand-by	Off	On	Blanked	<1W	Amber
Suspend	On	Off	Blanked	<1W	Amber
Off	Off	Off	Blanked	<1W	Amber
DC Power off			N/A	<1W	Off

According to VESA power saving signal. TCO'99 power saving requirement EPA energy star requirement

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3.6 Display identification

3.6.1 In accordance with VESA Display Channel Standard V1.0 and having DDC-2B and DDC/CI capability.

4.0 Visual characteristics

4.1 Test conditions

Unless otherwise specified, this specification is defined under the following conditions.

(1) Input signal: As defined in 3.3, 1280 x 1024 non-interlaced mode (80K/75Hz), signal sources must
have 75 ohm output impedance.

(2) Luminance setting: controls to be set to 200 nits with full screen 70 % duty cycle white signal

(3) Warm up: more than 30 minutes after power on with signal supplied.

(4) Ambient light: 400 -- 600 lux.

(5) Ambient temperature: 20 ± 5 °C

4.2 Resolution

Factory preset modes (15 modes)

#	Resolution	H-Frequency	Pixel rate	V-Frequency	Comment
1	640X350	31.5KHz	25.175	70Hz	IBM VGA 10h
2	720X400	31.5KHz	28.322	70Hz	IBM VGA 3h
3	640X480	37.5KHz	31.501	75Hz	
4	640X480	35.0KHz	30.24	67Hz	
5	640X480	31.5KHz	25.175	60Hz	
6	800X600	35.2KHz	36	56Hz	
7	800X600	46.9KHz	49.498	75Hz	
8	800X600	37.9KHz	40	60Hz	
9	832X624	49.7KHz	57.28	75Hz	MAC
10	1024X768	60.0KHz	78.75	75Hz	
11	1024X768	48.4KHz	65	60Hz	
12	1152X870	68.7KHz	100	75Hz	MAC
13	1152X900	71.8KHz	108	76Hz	SUN Mode II
14	1280X1024	64.0KHz	108	60Hz	
15	1280X1024	80.0KHz	135	75Hz	

Note: 1. Screen displays perfect picture at 15 factory-preset modes.
2. Screen displays visible picture with OSD warning when input modes are other then 34 preset modes

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4.3 Brightness: 200 nits (at panel color temperature, Screen center point, Fig. 1)

4.4 Image size

4.4.1 Actual display size
376x301mm

4.5 Brightness uniformity

Set contrast at 50% and turn the brightness to get average above 200 nits at center of the screen.
Apply the Fig 1. It should comply with the following formula:

$$\frac{\text{Minimum luminance of nine points (brightness)}}{\text{Maximum luminance of nine points (brightness)}} >= 0.75 \text{ (Min)}$$

4.6 Check Cross talk (S)

Apply Pattern 2. Set contrast at 50 % and brightness at 100 %. Measure A. Then output Pattern 3 and measure A The cross talk value:

$$\frac{ABS\ (A - A')}{A} \times 100\ \% < 1.5\ \% \text{ (Max)}$$

4.7 White color adjustment

There are three factory preset white color 9300K, 6500K, sRGB.

Apply full white pattern, with brightness in 100 % position and the contrast control at 50 % position.
The 1931 CIE Chromaticity (color triangle) diagram (x,y) coordinate for the screen center should be:

9300K CIE coordinates	X = 0.283 ± 0.020 Y = 0.297 ± 0.020
6500K CIE coordinates	X = 0.313 ± 0.020 Y = 0.329 ± 0.020
sRGB CIE coordinates	X = 0.313 ± 0.015 Y = 0.329 ± 0.015

5.0 Mechanical characteristics

5.1 Controls

Front. :
- DC power switch
- OSD function key
- UP/DOWN (Brightness key)
- LEFT/RIGHT (Volume key)
- Auto key

Rear. :
- Video signal connector
- Power cord socket

5.2 Unit dimension / Weight

Set dimension (incl. pedestal). : 442(W) * 420(H) * 201(D) mm
Net weight. : 5.3 kg

5.3 Tilt and swivel base

Basic base:
Tilt angle: -5 ° to + 20 °

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5.4 Transportation packages

5.4.1 Shipping dimension/Weight

Carton dimension. : 531(W) * 536(H) * 190(D) mm
Gross weight. : 7.2 Kg

5.4.2 Block unit / Palletization
Basic Base:

layers / block	sets/layer	sets/block unit
11/22	4/11	44

Blocks/container	
20 feet	40 feet
10	22

6.0 Environmental characteristics

The following sections define the interference and susceptibility condition limits that might occur between external
environment and the display device.

6.1 Susceptibility of display to external environment

Operating
- Temperature. : 5 to 40 degree C
- Humidity. : 80% max
- Altitude. : 0 to 12,000 feet

Storage
- Temperature. : -20 to 60 degree C
- Humidity. : 95% max
- Altitude. : 0 to 30,000 feet

Note: recommended at 5 to 35°C, Humidity less than 60 %

6.2 Transportation tests

Standard		ISTA-1A
Drop Test	Height	76.0 cm
	Sequence	1 corner 3 edges (Room temp) 6 faces
	Test Result	Electrical function ok Mechanical function ok No serious damage on set appearance (Room temp 20° C~23° C, humidity 40%~65%)
Vibration Test	Sequence	(1) PACKAGING Truck spectrum, 0.73Grms, 30min/Axis, 3 Axes
		(2) OPERATING 10-55-10 Hz, 0.35mm Ampl., 30min/Axis, 3 Axes
	Test Result	Electrical function ok Mechanical function ok No serious damage on set appearance
Half-Sine Shock Test		Non-operating 30G, 16 msec, 6 shocks Temperature : 23°C Humidity : 60 % Air pressure : 100 kpa

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6.3 Display disturbances from external environment
According to IEC 801-2 for ESD disturbances
6.4 Display disturbances to external environment
6.4.1 EMI
EMI: FCC, VCCI, CE, C-Tick, MPRIII, BCIQ, IC, BSMI, *IEC60601-1-2 (EU)
* Medical compliance only applies for dedicated models.
7.0 Reliability
7.1. Mean Time Between Failures
System MTBF (Excluding the LCD panel and CCFL): 50,000 hrs
CCFL MTBF: 30,000 hrs (50% of original brightness)
8.0 Quality assurance requirements
8.1 Acceptance test
According to MIL-STD-105D Control II level

AQL: 0.65 (major)
2.50 (minor)
(Please also refer to annual quality agreement)
Customer acceptance criteria: UAW0377/00
9.0 Serviceability
The serviceability of this monitor should fulfill the requirements, which are prescribed in UAW-0346 and must be checked with the checklist UAT-0361.

10.0 Philips' Flat Panel Monitors Pixel Defect Policy

BRIGHT DOT DEFECTS	ACCEPTABLE LEVEL	
MODEL	190C6	170C6
1 lit subpixel	3 or fewer	4 or fewer
2 adjacent lit subpixels	1 or fewer	2 or fewer
3 adjacent lit subpixels (one white pixel)	0	0
Distance between two bright dot defects*	25 mm or more	15 mm or more
Total bright dot defects of all types	3 or fewer	4 or fewer

BLACK DOT DEFECTS	ACCEPTABLE LEVEL	
MODEL	190C6	170C6
1 dark subpixel	5 or fewer	4 or fewer
2 adjacent dark subpixels	2 or fewer	2 or fewer
3 adjacent dark subpixels	0	0
Distance between two black dot defects*	15 mm or more	15 mm or more
Total black dot defects of all types	5 or fewer	4 or fewer

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TOTAL DOT DEFECTS	ACCEPTABLE LEVEL	
MODEL	190C6	170C6
Total bright or black dot defects of all types	5 or fewer	5 or fewer

Note:

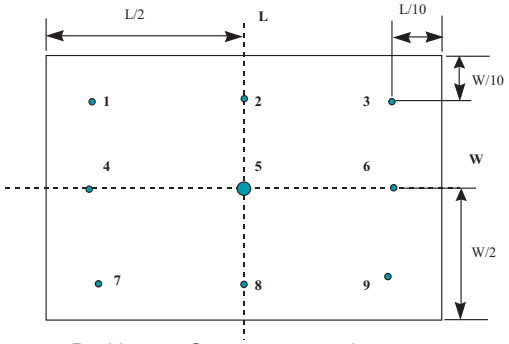
*Bright dot: Each pixel is comprised three sub-pixels or dots, one red, one green and one blue.

A *bright dot* is a sub-pixel that stands out on the screen when the monitor displays a dark pattern. A red or blue *bright dot* is more than 50 percent brighter than neighboring dots; a green bright dot is 30 percent brighter than neighboring dots.

*Dark dot: A *dark dot* is a sub-pixel that stands out on the screen when the monitor displays a light pattern.

** 1 or 2 adjacent sub pixel defects = 1 dot defect*
All Philips monitors are ISO13406-2 Compliant

Fig 1: Brightness and Uniformity



Position 5 = Screen center point

Fig 2: Cross talk pattern
Gray level 184 (256 Gray level)

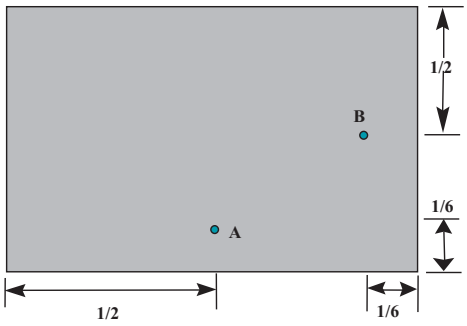
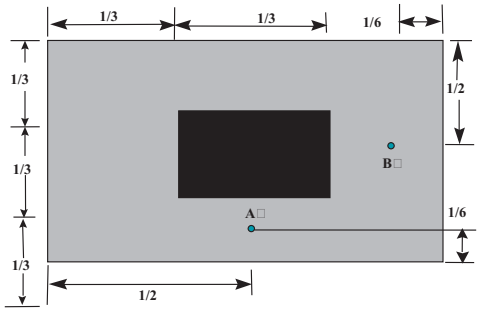


Fig 3: Cross talk pattern
Center at Gray level 0 (Black)



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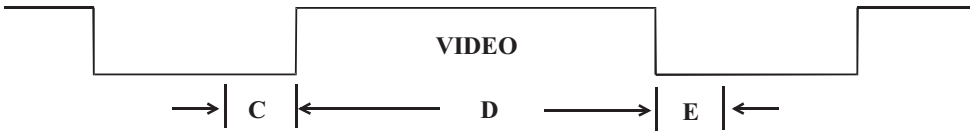
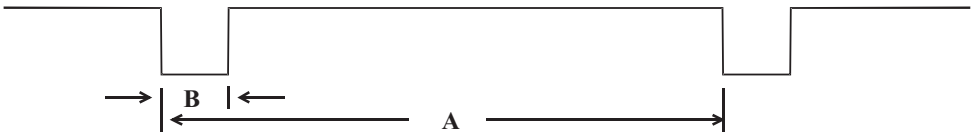
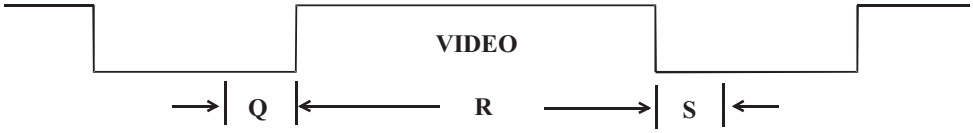
SEPARATE SYNC.

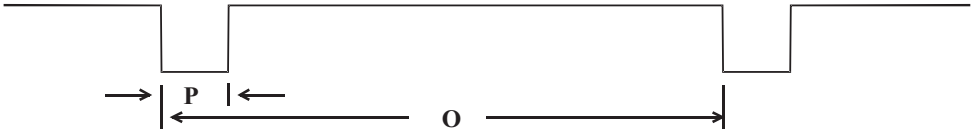


HORIZONTAL

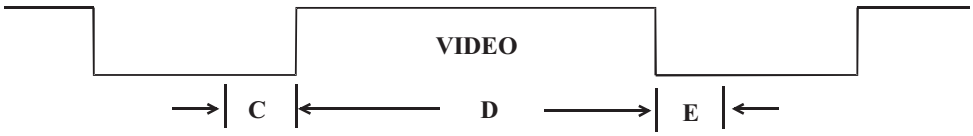




VERTICAL



COMPOSITE SYNC.



HORIZONTAL

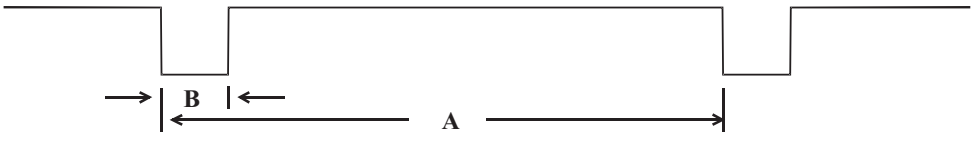


FIG-4 TIMING CHART -1

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CLASS NO.	19 inch TFT-LCD Monitor TYPE : 190C6FS/00 BRAND : PHILIPS	8639 000 16451	
2005-07-01			
NAME Peter V.	SUPERS.	15 590 — 14	10 A4
TY CHECK	DATE 2005-07-01	Property of PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.-B.E.	

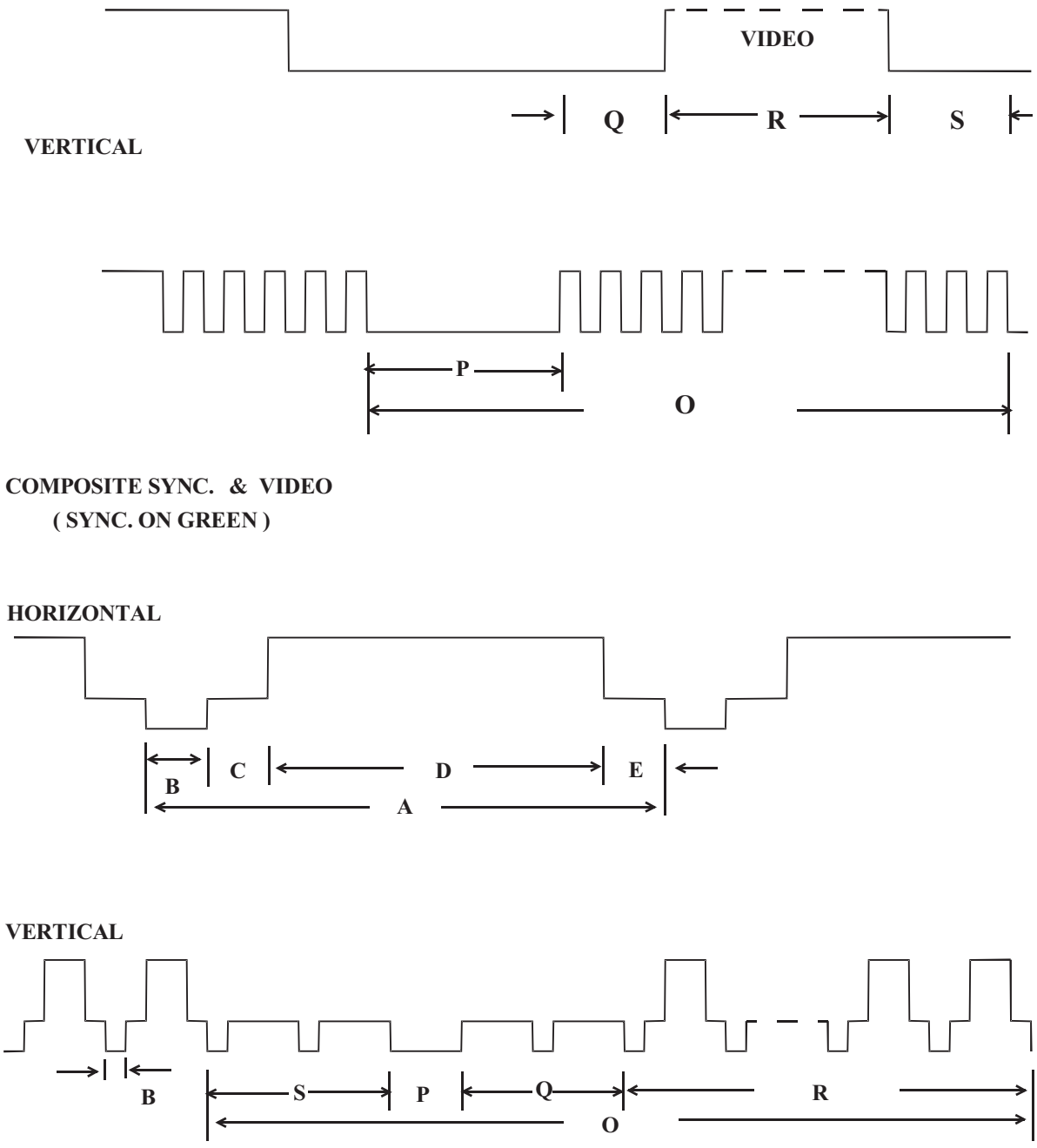

FIG-5 TIMING CHART -2

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CLASS NO.	19 inch TFT-LCD Monitor TYPE : 190C6FS/00 BRAND : PHILIPS			8639 000 16451			
2005-07-01							
NAME Peter V.	SUPERS.	15	590 — 15	10		A4	
TY / CHECK	DATE 2005-07-01	Property of PHILIPS ELECTRONICS INDUSTRIES (TAIWAN) LTD.-B.E.					

Scaler Schematic Diagram-1

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PHILIPS

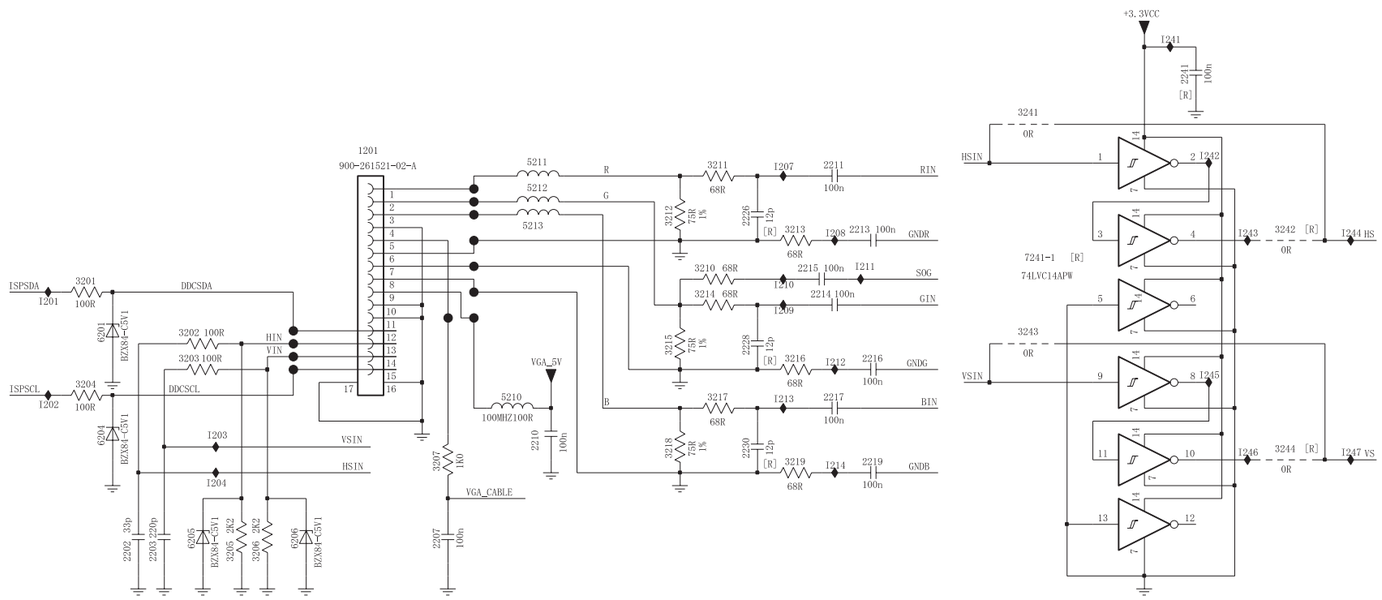
A

SCALER BOARD

SB: 61612 x 6

PB: 61622

Ref Des	Reserved
2226	223886715129 12p
2228	223886715129 12p
2230	223886715129 12p
2241	223878615649 100n
3242	232270296001
3244	232270296001
7241-1	93526039118 74LVC14APW
7241-2	93526039118
7241-3	93526039118
7241-4	93526039118
7241-5	93526039118
7241-6	93526039118



EXCEPT 1201 WERE CHIP COMPONENTS.

1201 C4
2202 E3
2203 E3
2207 E4
2210 E5
2211 C6
2213 C7
2214 D6
2215 D6
2216 D7
2217 D6
2219 E7
2226 C6
2228 D6
2230 E6
2241 C8
3201 D2
3202 D3
3203 D3
3204 D2
3205 E3
3206 E3
3207 E4
3210 D6
3211 C6
3212 C6
3213 C6
3214 D6
3215 D6
3216 D6
3217 D6
3218 E6
3219 E6
3241 C8
3242 C9
3243 D8
3244 E9
5210 D5
5211 C5
5212 C5
5213 C5
6201 D2
6204 E2
6205 E3
6206 E3
7241-1 D8
I201 D2
I202 D2
I203 E3
I204 E3
I207 C6
I208 C6
I209 D6
I210 D6
I211 D7
I212 D6
I213 D6
I214 E6
I241 B8
I242 C9
I243 C9
I244 C9
I245 D9
I246 E9
I247 E9

CHN CA-002872		SETNAME LCD SH6				
CLASS_NO	DSUB 170S6FG/00			3138 158 6165	1 ———	
2004-12-15 3					1 2005-02-18	
NAME Peter V./Stella Fann		SUPERS.	4	10	130 - 1	*** A3
MGr CHECK ********		DATE 2004-12-15		© KONINKLIJKE PHILIPS ELECTRONICS N.V. 2000		

Scaler Schematic Diagram-2

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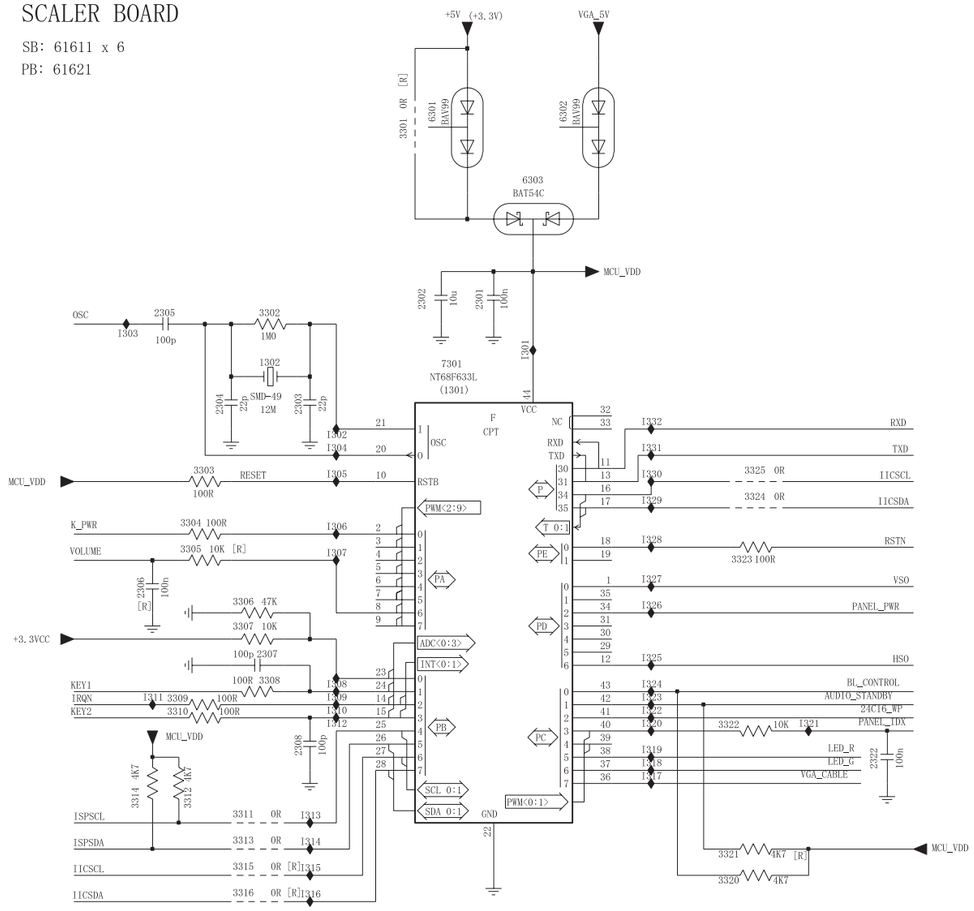
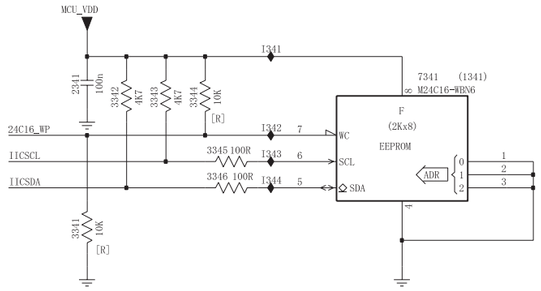
SCALER BOARD

SB: 61611 x 6

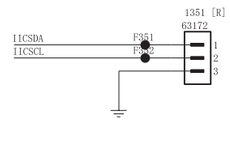
PB: 61621

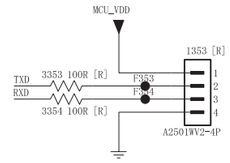




Ref_Des	Reserved
1351	243803100116 63172
1353	313816876941 A2501WV2-4P
2306	223878615649 100n
3301	232273091002
3305	212211805669 10K
3315	232270296001
3316	232270296001
3321	232270260472 4K7
3341	232270260103 10K
3344	212211805669 10K
3353	232270260101 100R
3354	232270260101 100R

ITEM	15″	17″/19″
3301	V	X
6301	X	V



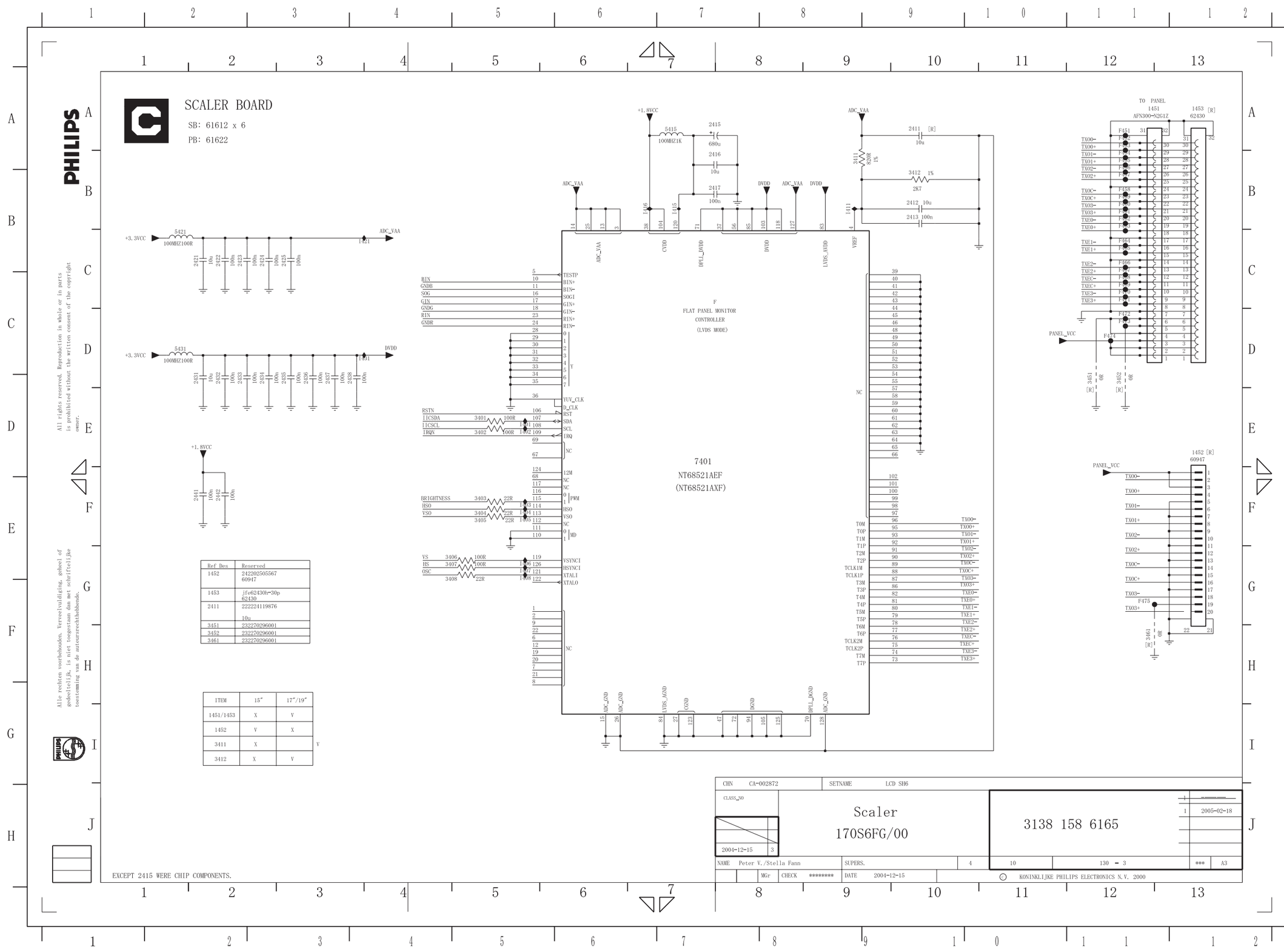


EXCEPT 1351,1353 WERE CHIP COMPONENTS.

1302 C2	I323 D4		
1351 C9	I324 D4		
1353 D9	I325 D4		
2301 B3	I326 D4		
2302 B3	I327 D4		
2303 C3	I328 D4		
2304 C2	I329 C4		
2305 B2	I330 C4		
2306 D2	I331 C4		
2307 D2	I332 C4		
2308 E3	I341 A8		
2322 E6	I342 A8		
2341 A7	I343 B8		
3301 A3	I344 B8		
3302 B2			
3303 C2			
3304 D2			
3305 D2			
3306 D2			
3307 D2			
3308 D2			
3309 D2			
3310 E2			
3311 E2			
3312 E2			
3313 E2			
3314 E2			
3315 E2			
3316 F2			
3320 E5			
3321 E5			
3322 E5			
3323 D5			
3324 C5			
3325 C5			
3341 B7			
3342 A7			
3343 A7			
3344 A7			
3345 B8			
3346 B8			
3353 D8			
3354 D8			
6301 A4			
6302 A4			
6303 B4			
7301 C3			
7341 A9			
F351 C9			
F352 C9			
F353 D9			
F354 D9			
I301 C4			
I302 C3			
I303 B2			
I304 C3			
I305 C3			
I306 D3			
I307 D3			
I308 D3			
I309 D3			
I310 E3			
I311 D2			
I312 E3			
I313 E3			
I314 E3			
I315 E3			
I316 F3			
I317 E4			
I318 E4			
I319 E4			
I320 E4			
I321 E5			
I322 E4			

CHN ECO-		SETNAME LCD SH6			
CLASS_NO	MICRO 170S6FG/00		3138 158 6165	1	--------
2004-12-15 3					
NAME Peter V./Stella Fann	SUPERS.	4	10	130 -	*** A3 2
MGr CHECK ********	DATE 2004-12-15	© KONINKLIJKE PHILIPS ELECTRONICS N.V. 2000			

Scaler Schematic Diagram-3



Ref Des	Reserved
1452	242202505567 60947
1453	jfe62430r-30p 62430
2411	222224119876 10u
3451	23227029600l
3452	23227029600l
3461	23227029600l

ITEM	15"	17"/19"
1451/1453	X	V
1452	V	X
3411	X	V
3412	X	V

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CHN	CA-002872	SETNAME	LCD SH6
CLASS_NO		Scaler 170S6FG/00	3138 158 6165
2004-12-15	3		1 2005-02-18
NAME	Peter V./Stella Fann	SUPERS.	4 / 10 / 130 - 3 / *** / A3
	MGr	CHECK ********	DATE 2004-12-15

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1451 A11
1452 D12
1453 A12
2411 A9
2412 B9
2413 B9
2415 A7
2416 A7
2417 B7
2421 B2
2422 B2
2423 B2
2424 B3
2425 B3
2431 D2
2432 D2
2433 D2
2434 D3
2435 D3
2436 D3
2437 D3
2438 D4
2441 E2
2442 E2
3401 D5
3402 D5
3403 E5
3404 E5
3405 E5
3406 E5
3407 E5
3408 F5
3411 A8
3412 B9
3451 D11
3452 D11
3461 F11
5415 A7
5421 B2
5431 C2
7401 D7
F451 A11
F452 A11
F453 A11
F454 A11
F455 A11
F456 B11
F457 B11
F458 B11
F459 B11
F460 B11
F461 B11
F462 B11
F463 B11
F464 B11
F465 B11
F466 B11
F467 C11
F468 C11
F469 C11
F470 C11
F471 C11
F472 C11
F473 C11
F474 C11
F475 F11
1401 D5
1402 D5
1403 E5
1404 E5
1405 E5
1406 E5
1407 E5
1408 E5
1411 B8
1415 B7
1416 B6
1421 B4
1431 C4

Scaler Schematic Diagram-4

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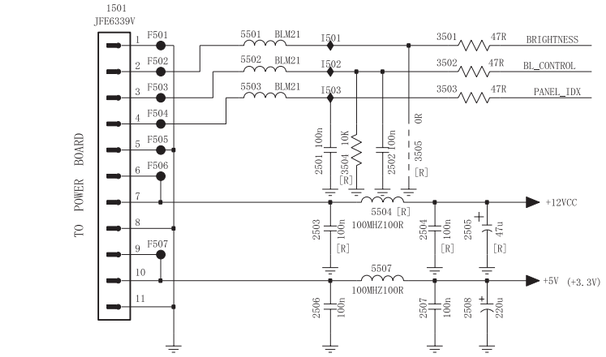
SCALER BOARD

SB: 61612 x 6

PB: 61622



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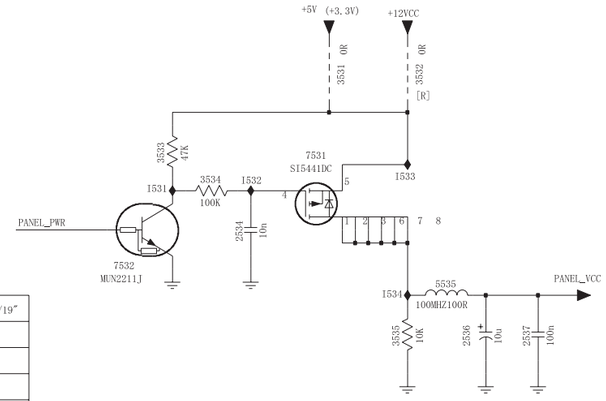
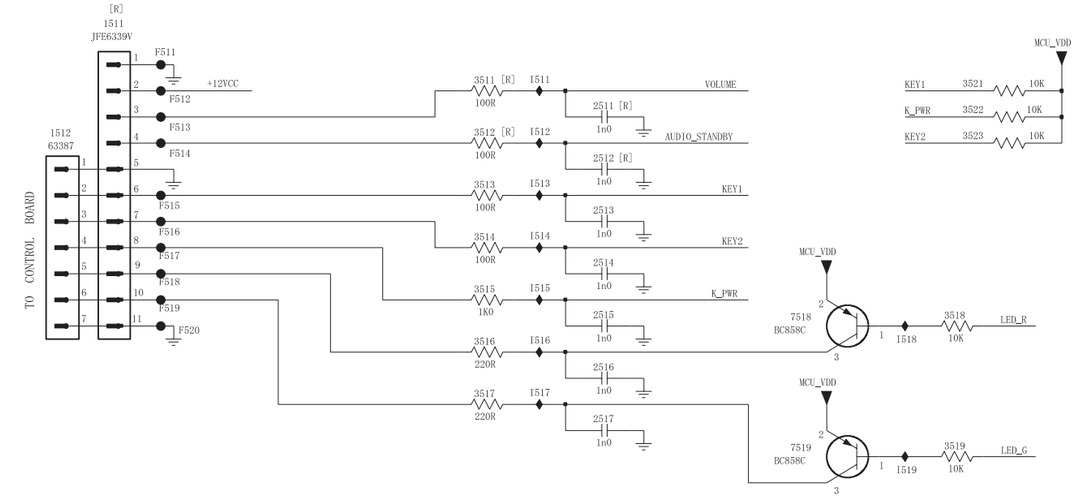
1511	313816872071 JFE6339V
2503	223878615649 100n
2504	223878615649 100n
2505	203803527304 100u
2511	223858615623 1n0
2512	223858615623 1n0
3504	212211805669 10K
3505	232270296001
3511	232270260101 100R
3512	232270260101 100R
3532	232271191032
3545	232271191032
5504	242254945579

ITEM	15"	17"/19"
3545	V	X
7545	X	V
2545	X	V
2546	X	V
2547	X	V
2548	X	V



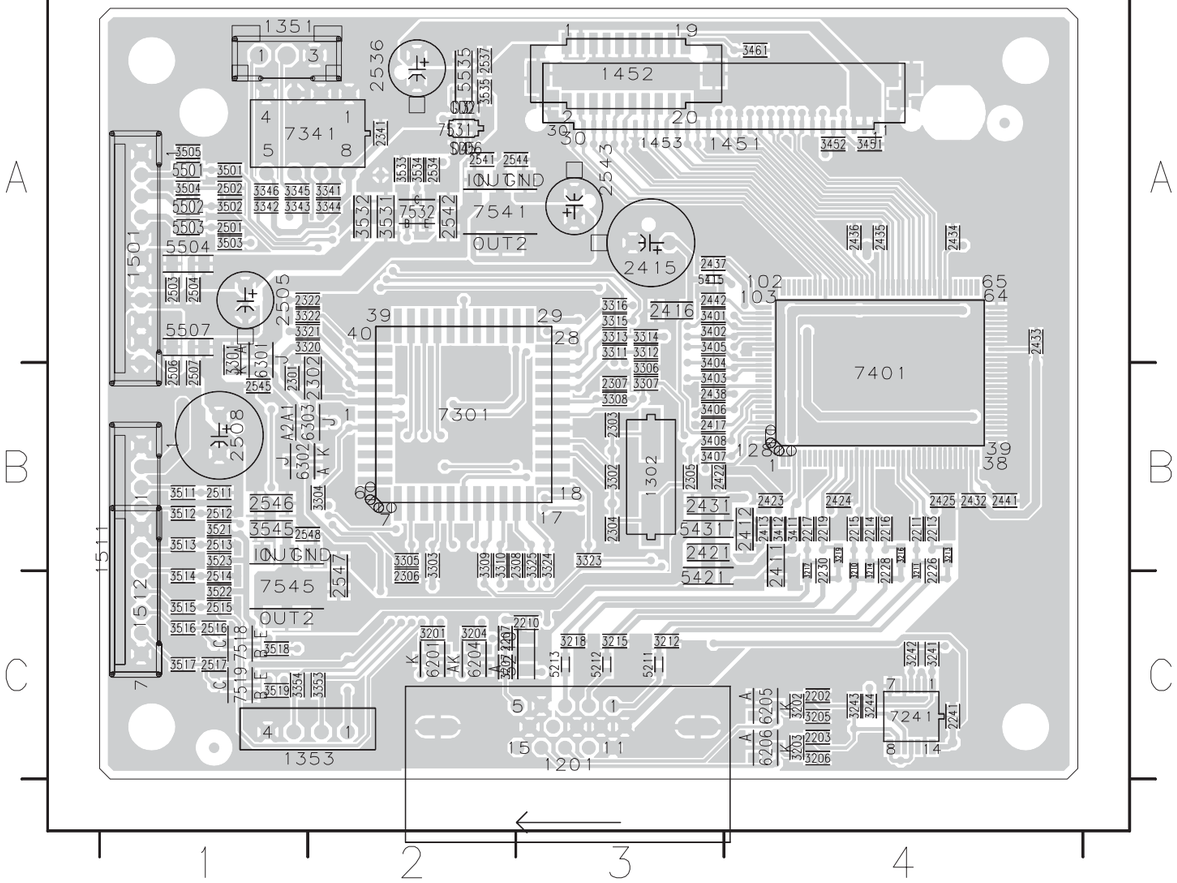


EXCEPT 1501, 1511, 1512, 2505, 2508, 2536, 2543 WERE CHIP COMPONENTS.

1501 D1	F513 D1
1511 D1	F514 D1
1512 D1	F515 E1
2501 B2	F516 E1
2502 B2	F517 E1
2503 B2	F518 E1
2504 B3	F519 E1
2505 B3	F520 E1
2506 C2	I501 A2
2507 C3	I502 B2
2508 C3	I503 B2
2511 D4	I511 D3
2512 D4	I512 D3
2513 E4	I513 E3
2514 E4	I514 E3
2515 E4	I515 E3
2516 F4	I516 E3
2517 F4	I517 F3
2534 B7	I518 E5
2536 C9	I519 F5
2537 C9	I531 B7
2541 D7	I532 B7
2542 D7	I533 B8
2543 D9	I534 B8
2544 D8	I541 D9
2545 F7	I545 F9
2546 F7	
2547 F9	
2548 F8	
3501 A3	
3502 B3	
3503 B3	
3504 B2	
3505 B3	
3511 D3	
3512 D3	
3513 E3	
3514 E3	
3515 E3	
3516 E3	
3517 F3	
3518 E6	
3519 F6	
3521 D6	
3522 D6	
3523 D6	
3531 A8	
3532 A8	
3533 B7	
3534 B7	
3535 C8	
3545 E8	
5501 A2	
5502 B2	
5503 B2	
5504 B2	
5507 C2	
5535 B8	
7518 E5	
7519 F5	
7531 B8	
7532 B7	
7541 D8	
7545 E8	
F501 A1	
F502 B1	
F503 B1	
F504 B1	
F505 B1	
F506 B1	
F507 C1	
F511 D1	
F512 D1	

CHN CA-002872	SETNAME LCD SH6		
CLASS_NO	CONNECTOR 170S6FG/00	3138 158 6165	1 2005-02-18
2004-12-15 3			
NAME Peter V./Stella Fann	SUPERS. 4	130 -	A3 4
CHECK	DATE 2004-12-15	KONINKLIJKE PHILIPS ELECTRONICS N.V. 2000	

Scaler Board C.B.A-1



1201	C3	2434	A4	3219	B4	3502	A1	7532	A2
1302	B3	2435	A4	3241	C4	3503	A1	7541	A2
1351	A1	2436	A4	3242	C4	3504	A1	7545	C1
1353	C1	2437	A3	3243	C4	3505	A1		
1451	A4	2438	B3	3244	C4	3511	B1		
1452	A3	2441	B4	3301	A1	3512	B1		
1453	A3	2442	A3	3302	B3	3513	B1		
1501	A1	2501	A1	3303	B2	3514	C1		
1511	B1	2502	A1	3304	B2	3515	C1		
1512	C1	2503	A1	3305	B2	3516	C1		
2202	C4	2504	A1	3306	B3	3517	C1		
2203	C4	2505	A1	3307	B3	3518	C1		
2207	C2	2506	B1	3308	B3	3519	C1		
2210	C3	2507	B1	3309	B2	3521	B1		
2211	B4	2508	B1	3310	B2	3522	C1		
2213	B4	2511	B1	3311	A3	3523	B1		
2214	B4	2512	B1	3312	A3	3531	A2		
2215	B4	2513	B1	3313	A3	3532	A2		
2216	B4	2514	C1	3314	A3	3533	A2		
2217	B4	2515	C1	3315	A3	3534	A2		
2219	B4	2516	C1	3316	A3	3535	A2		
2226	B4	2517	C1	3320	A1	3545	B1		
2228	B4	2534	A2	3321	A1	5210	C2		
2230	B4	2536	A2	3322	A1	5211	C3		
2241	C4	2537	A2	3323	B3	5212	C3		
2301	B1	2541	A2	3324	B3	5213	C3		
2302	B2	2542	A2	3325	B3	5415	A3		
2303	B3	2543	A3	3341	A2	5421	C3		
2304	B3	2544	A2	3342	A1	5431	B3		
2305	B3	2545	B1	3343	A1	5501	A1		
2306	C2	2546	B1	3344	A2	5502	A1		
2307	B3	2547	C2	3345	A1	5503	A1		
2308	B2	2548	B1	3346	A1	5504	A1		
2322	A1	3201	C2	3353	C2	5507	A1		
2341	A2	3202	C4	3354	C1	5535	A2		
2411	B4	3203	C4	3401	A3	6201	C2		
2412	B4	3204	C2	3402	A3	6204	C2		
2413	B4	3205	C4	3403	B3	6205	C4		
2415	A3	3206	C4	3404	A3	6206	C4		
2416	A3	3207	C2	3405	A3	6301	A1		
2417	B3	3210	B4	3406	B3	6302	B1		
2421	B3	3211	B4	3407	B3	6303	B1		
2422	B3	3212	C3	3408	B3	7241	C4		
2423	B4	3213	B4	3411	B4	7301	B2		
2424	B4	3214	B4	3412	B4	7341	A2		
2425	B4	3215	C3	3451	A4	7401	B4		
2431	B3	3216	B4	3452	A4	7518	C1		
2432	B4	3217	B4	3461	A4	7519	C1		
2433	A4	3218	C3	3501	A1	7531	A2		

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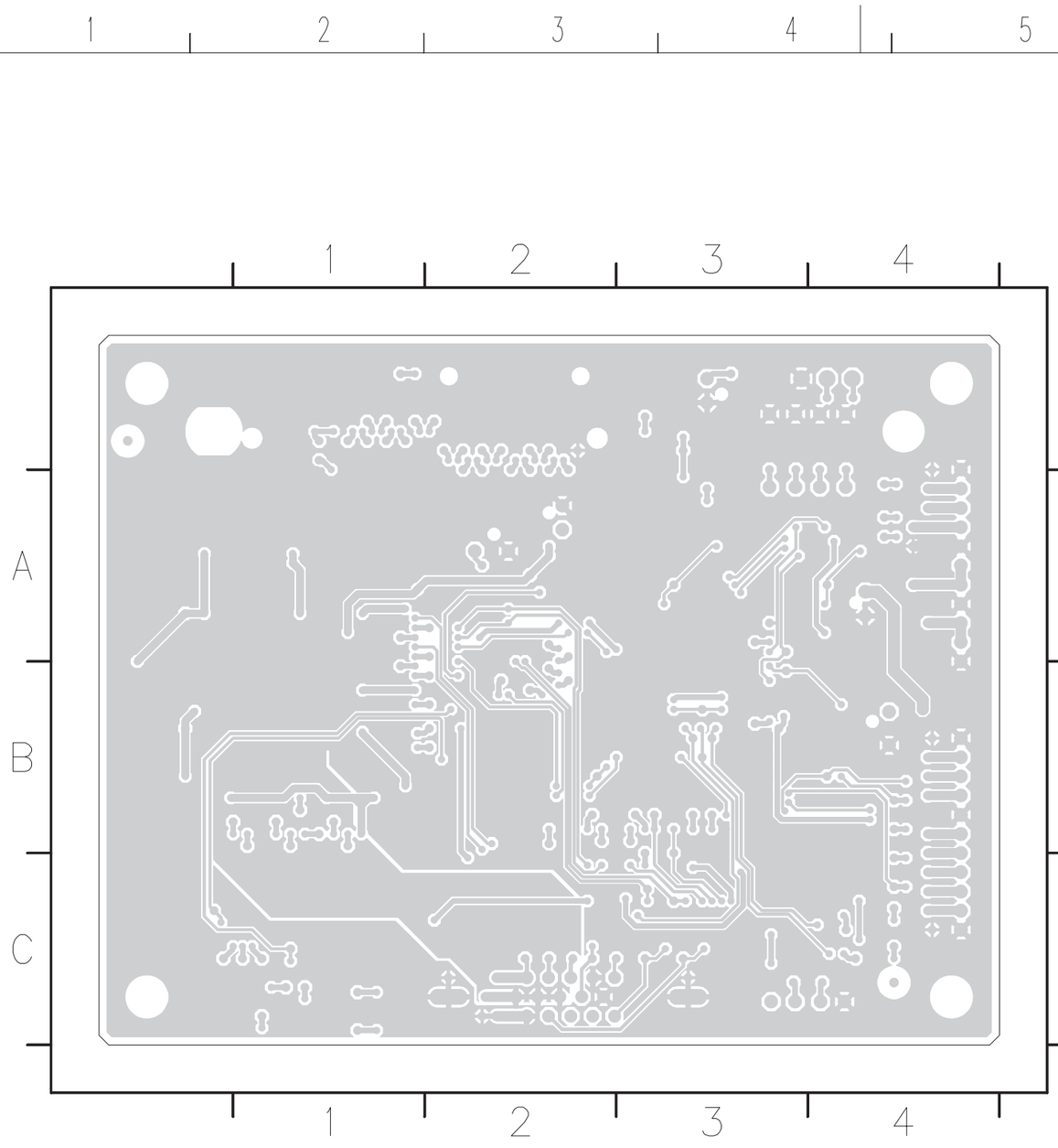
CN: CA-002872	SH6 170		
CLASS NO. 3XX000	Scaler Board LCD SH6 170S6	3138 103 6161	2 2005-02-18 1 2004-12-14
2004-12-14 3			
NAME Peter V./Stella	SUPERS 2	10 132 - 1	A3
CHECK	DATE 2004-12-14	© Philips Electronics N.V.	

Scaler Board C.B.A-2



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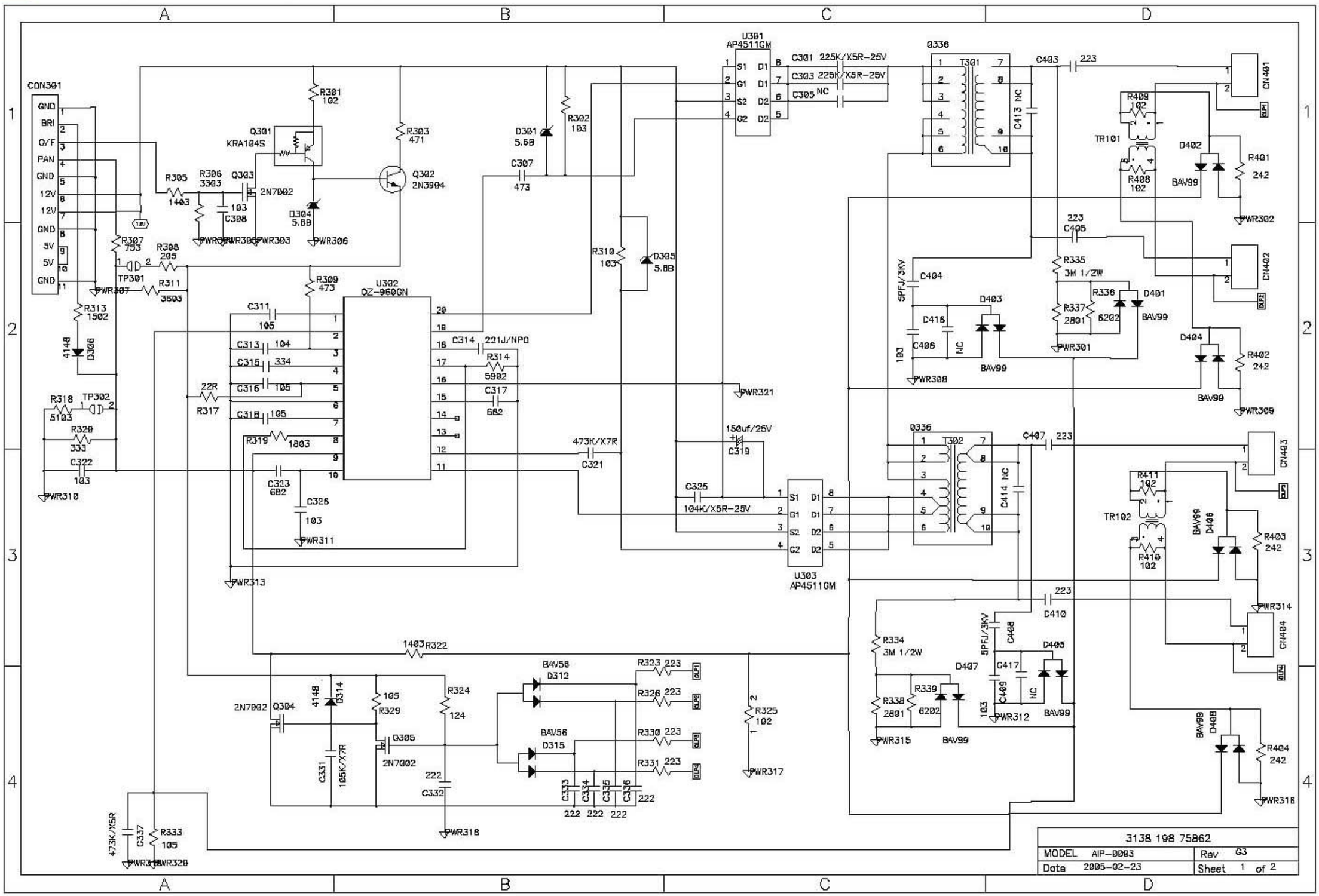
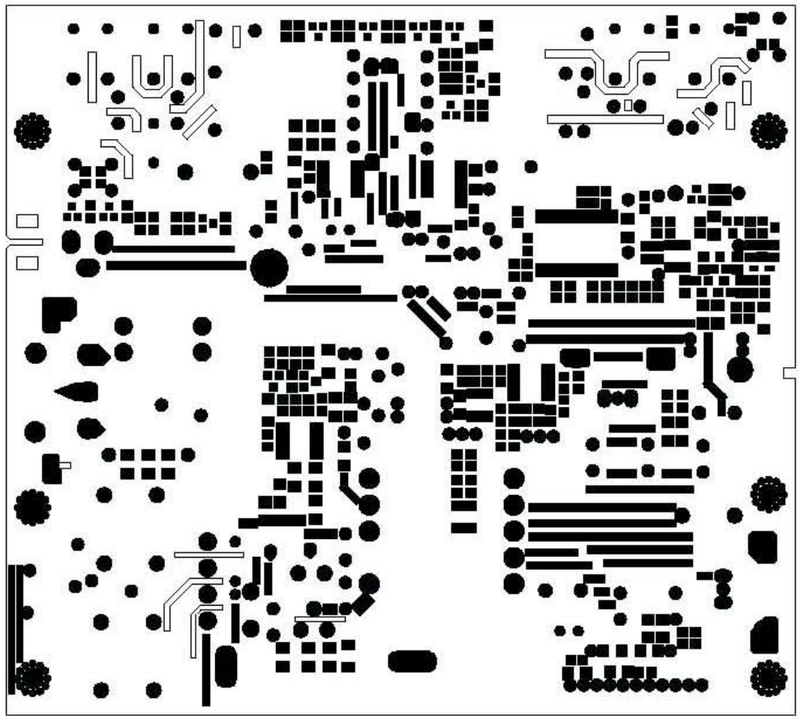
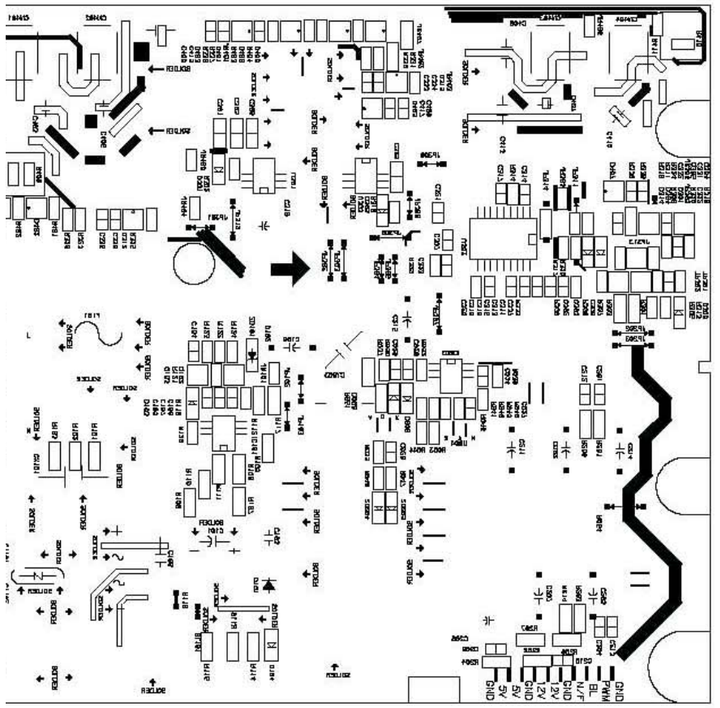
CN: CA-002872	SH6 170		
CLASS NO. 3XX000	Scaler Board LCD SH6 170S6	3138 103 6161	2 2005-02-18 / ~~1 2004-12-14~~
2004-12-14 3			
NAME Peter V./Stella	SUPERS 2	10 132 - 2	A3
CHECK	DATE 2004-12-14	© Philips Electronics N.V.	

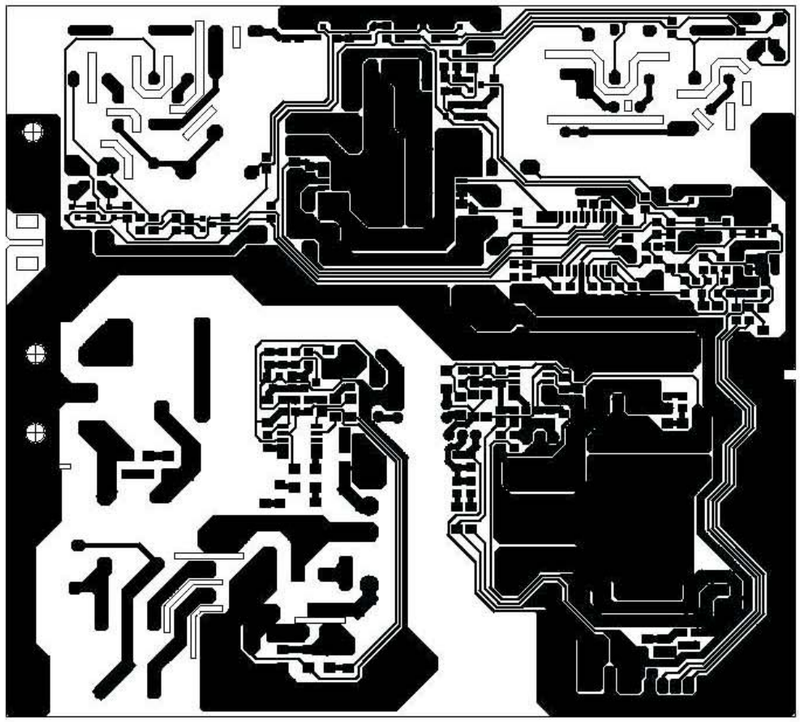
Power Schematic Diagram

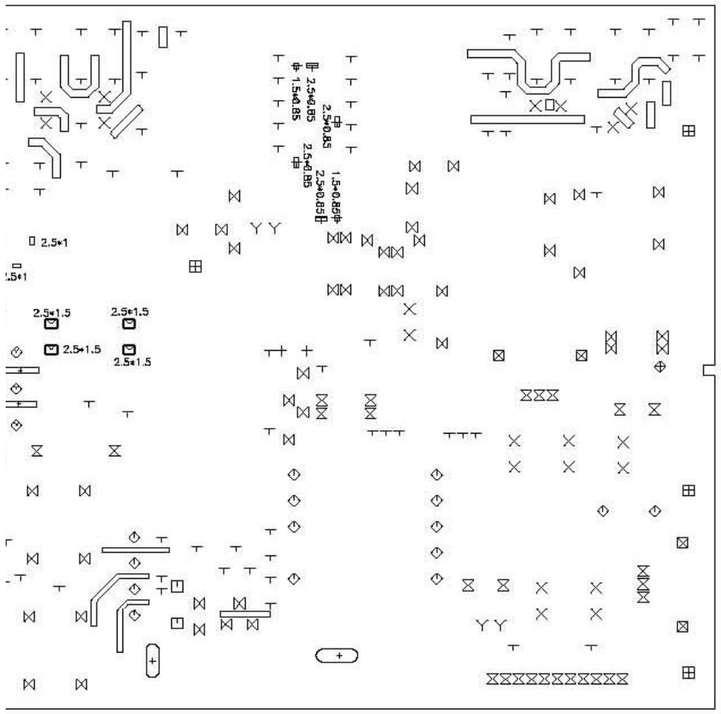


Power Board C.B.A









Drill Table			
Hole Dia (mm)	Symbol	Quantity	Plated
0.800	+	2	Yes
0.900	X	20	Yes
0.965	Y	4	Yes
1.000	⊤	87	Yes
1.100	⧖	27	Yes
1.200	⋈	47	Yes
1.400	⊡	2	Yes
1.500	◈	15	Yes
1.700	⊠	4	Yes
2.200	◈	3	Yes
2.500	⊠	4	Yes
2.900	⊕	1	Yes
3.500	⊞	8	Yes
4.500	◈	1	Yes

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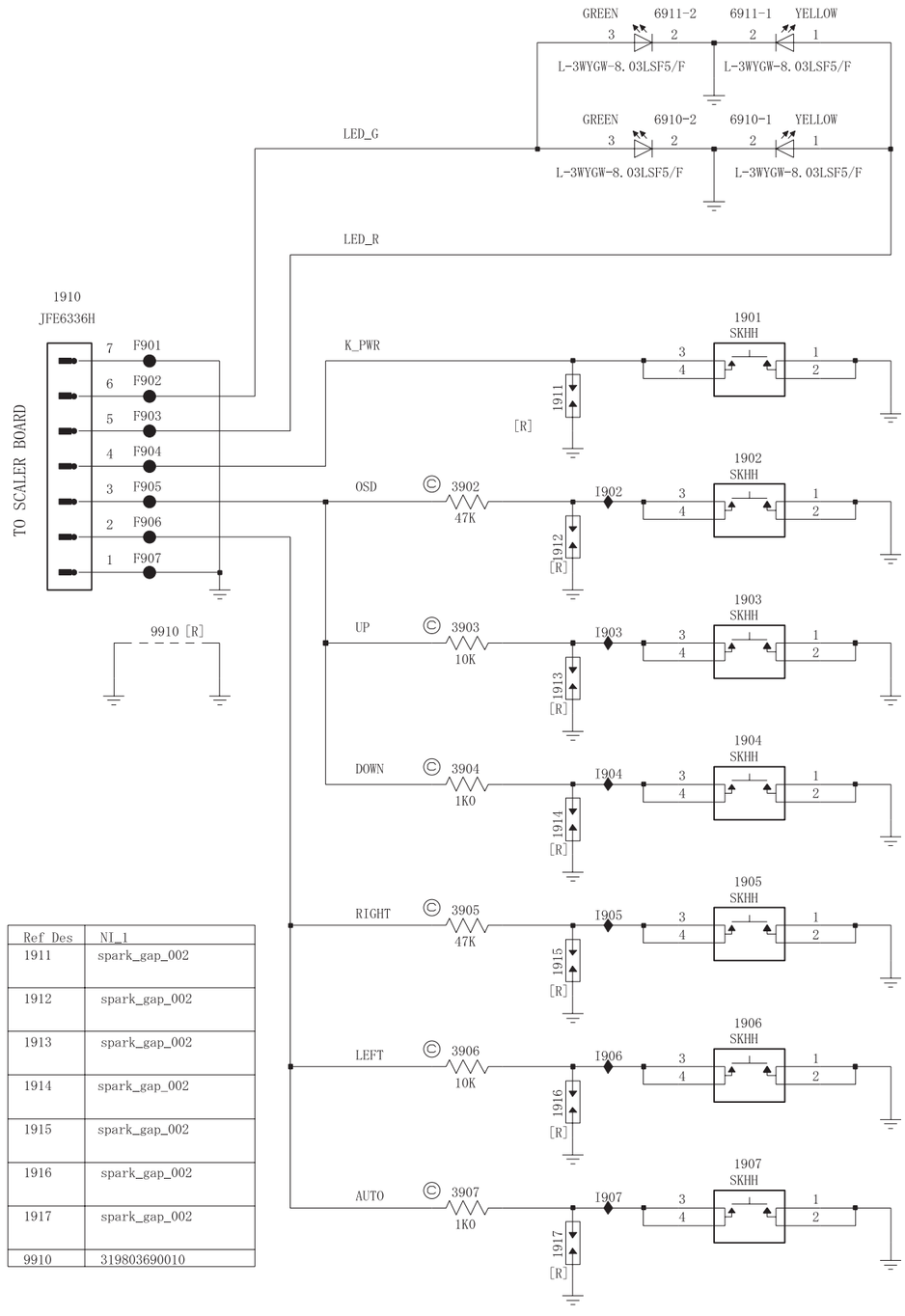
Control Board

SB: 62261 x20
PB: 62271



Ref Des	NI_1
1911	spark_gap_002
1912	spark_gap_002
1913	spark_gap_002
1914	spark_gap_002
1915	spark_gap_002
1916	spark_gap_002
1917	spark_gap_002
9910	319803690010

© STAND FOR CHIP COMPOMENTS.

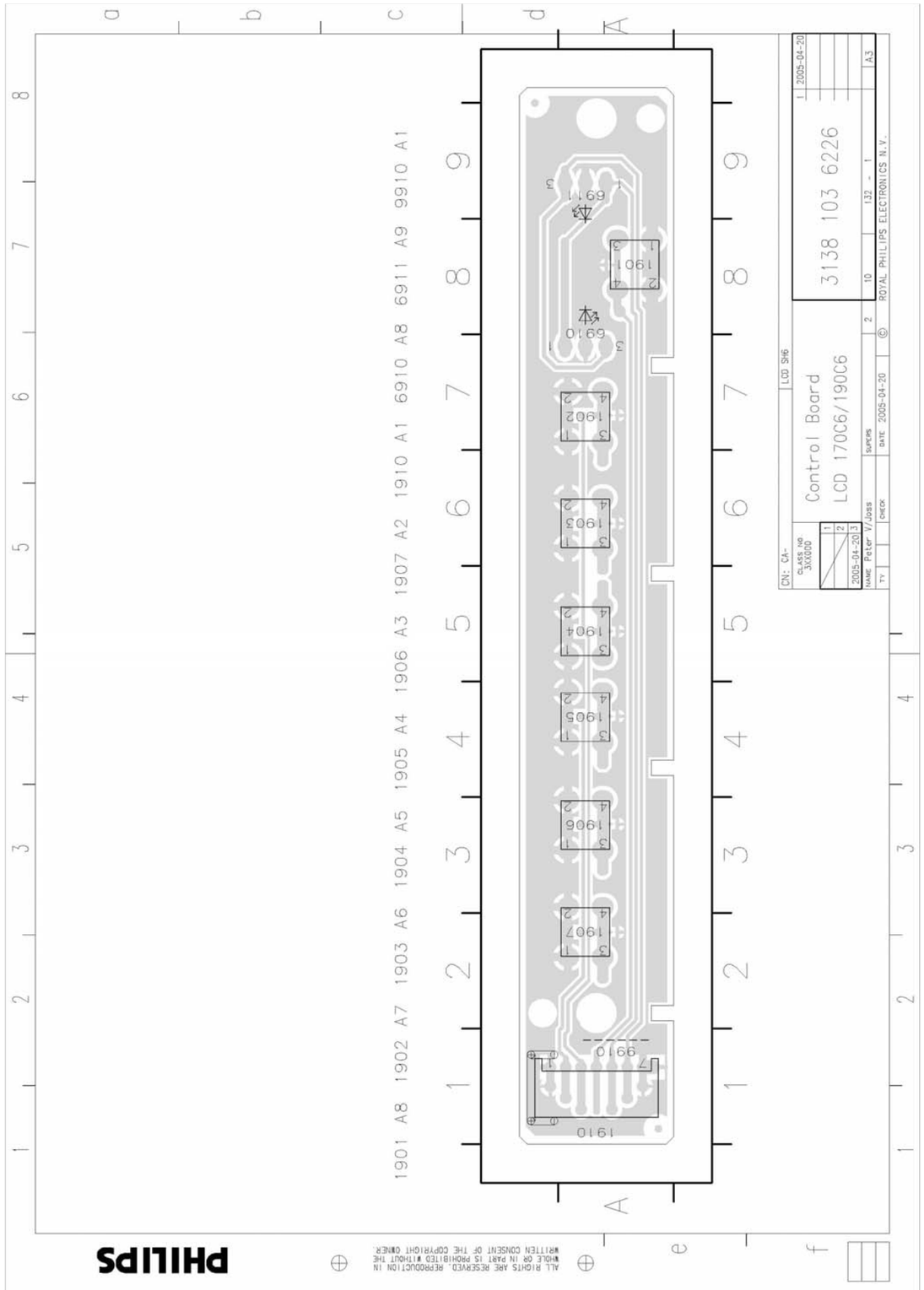
1901 B4
1902 C4
1903 D4
1904 D4
1905 E4
1906 E4
1907 F4
1910 B1
1911 C3
1912 C3
1913 D3
1914 D3
1915 E3
1916 F3
1917 F3
3902 C2
3903 D2
3904 D2
3905 E2
3906 E2
3907 F2
6910-1 B4
6910-2 B3
6911-1 A4
6911-2 A3
9910 D1
F901 B1
F902 C1
F903 C1
F904 C1
F905 C1
F906 C1
F907 C1
I902 C3
I903 D3
I904 D3
I905 E3
I906 E3
I907 F3

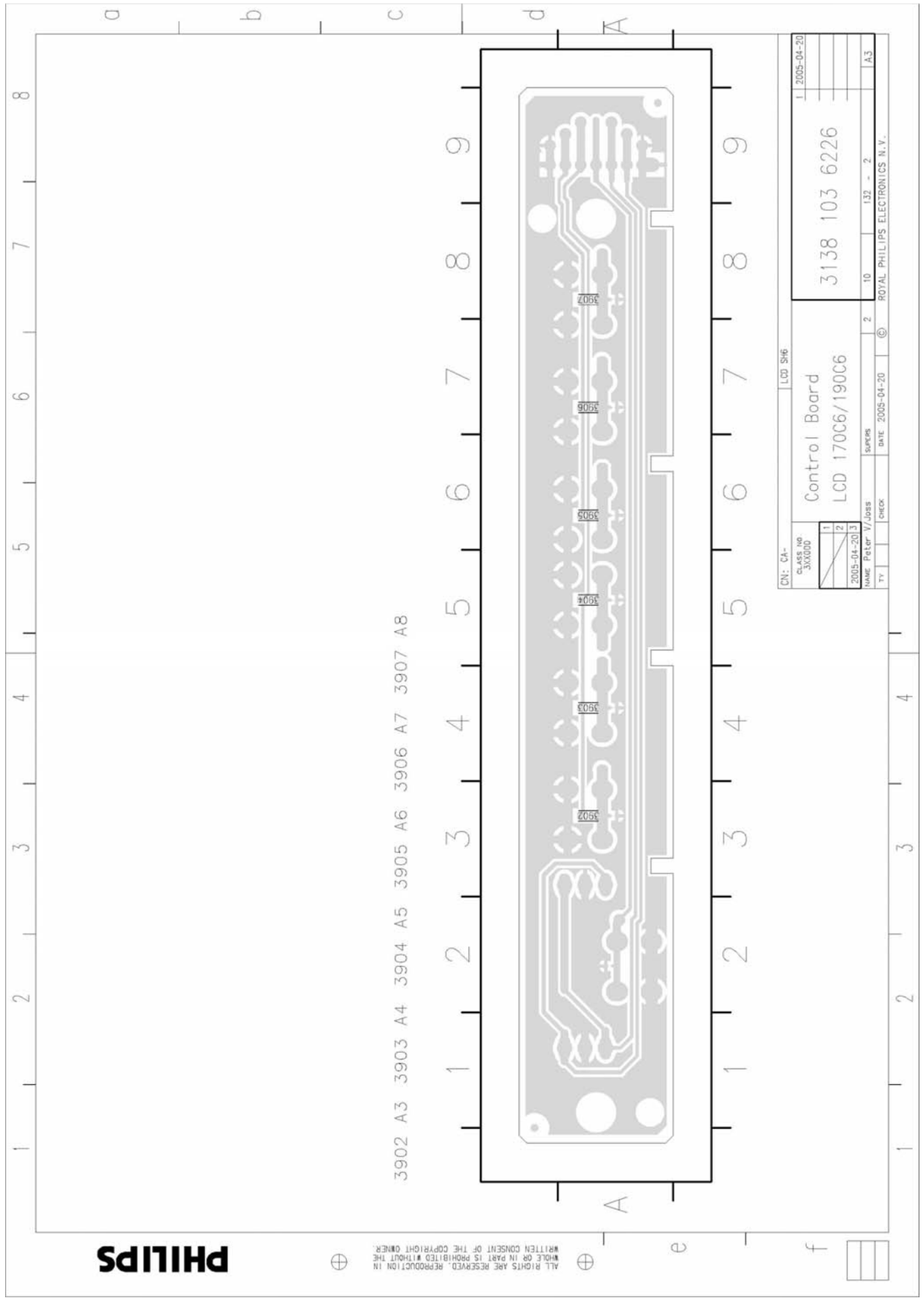
CHN CA-	SETNAME LCD SH6		
CLASS_NO	CONTROL BOARD 170C6FS/00	3138 158 6377	1 ———
2005-04-22 3			
NAME Peter V./Stella Fann	SUPERS. 1	10 130 - 1	A4
TY CHECK	DATE 2005-04-22	© ROYAL PHILIPS ELECTRONICS N.V. 2005	

Control Schematic Diagram

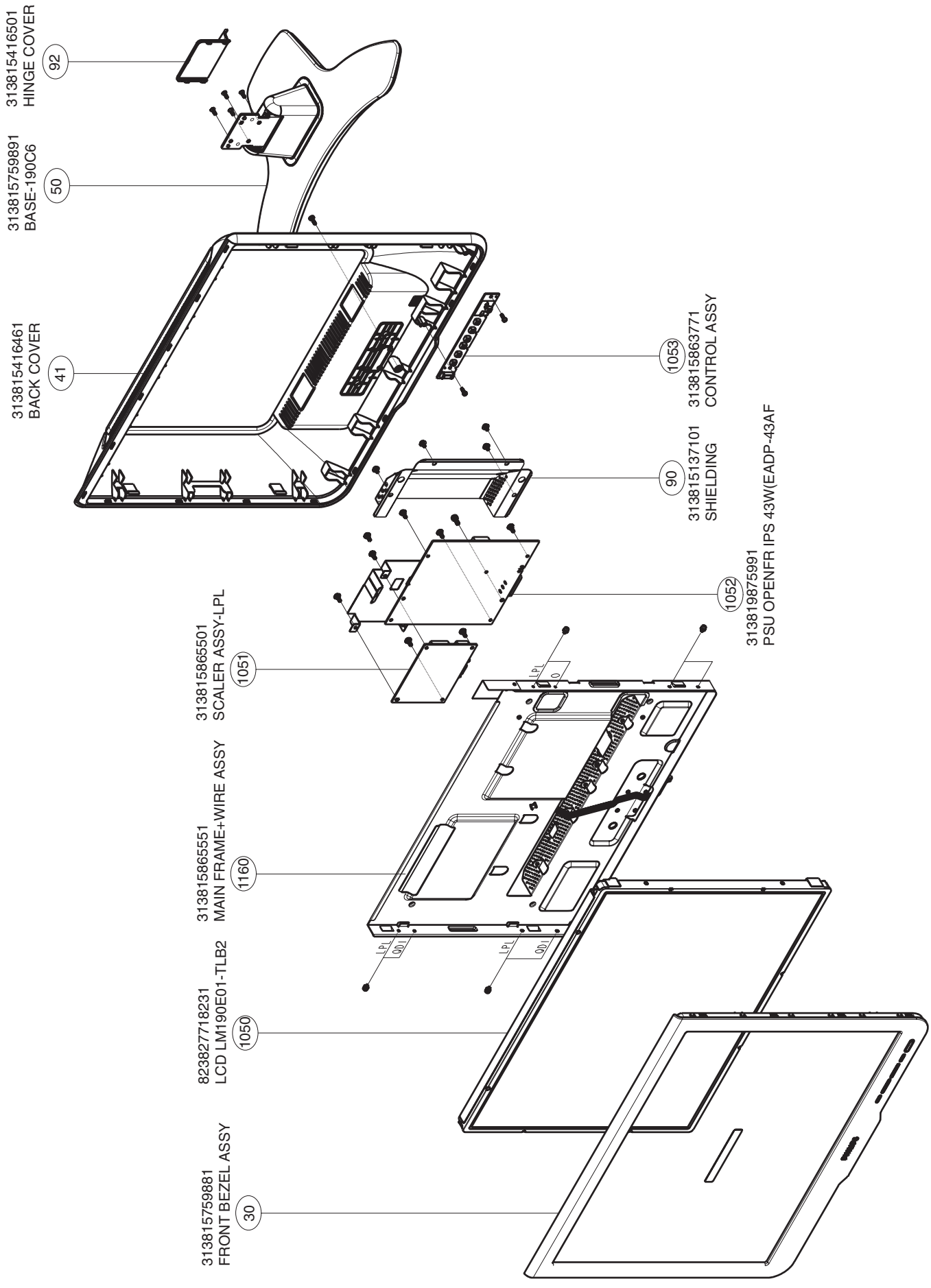
Go to cover page

Control Board C.B.A




3902 A3 3903 A4 3904 A5 3905 A6 3906 A7 3907 A8
Control Board
LCD 170C6/190C6
3138 103 6226
ROYAL PHILIPS ELECTRONICS N.V.
PHILIPS

Exploded View



Recommended Parts List

Go to cover page

Recommended Parts List
TYPE:190C6FS/00

30	313815759881	FRONT BEZEL ASSY
31	313815416451	BEZEL
32	313815416481	POWER BUTTON
33	313815416471	CONTROL BUTTON
34	313815416491	POWER LENS
41	313815416461	BACK COVER
50	313815759891	BASE-190C6
90	313815137101	SHIELDING
92	313815416501	HINGE COVER
98	313810440571	HOUSING COVER
450	313815640391	CARTON
451	313815640401	CUSHION-R
452	313815640411	CUSHION-L
453	313810656651	PE BAG
7301	313815865511	CPU IC ASSY
7301	932220582682	IC SM NT68F633L (NOVA)
7341	313815865521	EEPROM ASSY-LPL
7341	932218650682	IC AT24C16A-10PU-2.7 (ATME)
7401	932222435671	IC SM NT68521AEFG (NOVA)
7518	932217439685	TRA SIG SM BC857C (KEC0)
7531	932216638668	FET POW SM SI5441DC-E3 (VISH)
7532	932217440685	TRA SIG SM KRC102S (KEC0)
7541	932222077668	IC SM AME1117ECGTZ (AME0)
8161	313819876211	CBLE-017 7/200/7 - 427 AWG28
8163	313819876141	FFC 30/163/30 PITCH 1.0MM

Model: 190C6FS/00(LPL) 12NC: 8639 000 16451

Mechanical Parts

30	313815759881	FRONT BEZEL ASSY
31	313815416451	BEZEL
32	313815416481	POWER BUTTON
33	313815416471	CONTROL BUTTON
34	313815416491	POWER LENS
41	313815416461	BACK COVER
50	313815759891	BASE-190C6
90	313815137101	SHIELDING
92	313815416501	HINGE COVER
98	313810440571	HOUSING COVER
301	313815137471	METAL FRAME
1160	313815865551	MAIN FRAME+WIRE ASSY

Packing Parts

450	313815640391	CARTON
451	313815640401	CUSHION-R
452	313815640411	CUSHION-L
453	313810656651	PE BAG

Accessory

602	313811708561	E-D.F.U.
1157	313812874931	MAINSCORD
1158	313819871182	CORD SUB-D 15/1M8/SUB-D 15 BK

miscellanea

291	313815568271	LABEL-CPU
295	313815568281	LABEL-EEPROM-LPL
615	313811708521	HEX CODE OF F/W(NO MATL REQ)
1302	243854300079	RES XTL SM 12MHZ 32P SMD-49
1341	243803100435	SOC IC V 8P F 2.54 DIL
1451	242202519002	CON H 30P F 1.00 SM FFC 0.3
1501	242202518824	CON V 11P M 2.00 63391
1512	242202518999	CON V 7P M 2.00 61387
1901	242212803007	SWI TACT 1P 1POS 12V V 5MM
1902	242212803007	SWI TACT 1P 1POS 12V V 5MM
1903	242212803007	SWI TACT 1P 1POS 12V V 5MM
1904	242212803007	SWI TACT 1P 1POS 12V V 5MM
1905	242212803007	SWI TACT 1P 1POS 12V V 5MM
1906	242212803007	SWI TACT 1P 1POS 12V V 5MM
1907	242212803007	SWI TACT 1P 1POS 12V V 5MM
4444	313810610473	CD ROM - SERVICE MANUAL
4444	313810610474	SERVICE MANUAL
4444	313810610492	SERVICE MANUAL - INFOEMATION
8161	313819876211	CBLE-017 7/200/7 - 427 AWG28
8163	313819876141	FFC 30/163/30 PITCH 1.0MM

LCD Panel

1050	823827718231	LCD LM190E01-TLB2

PCB Assy

1051	313815865501	SCALER ASSY-LPL
1052	313819875991	PSU OPENFR IPS 43W(EADP-43AF
1053	313815863771	CONTROL ASSY

PCB Assy

1051	313815865501	SCALER ASSY-LPL

2202	223886715339	CER1 0603 NP0 50V 33P PM5
2203	223886715221	CER1 0603 NP0 50V 220P PM5
2207	223878615649	CER2 0603 X7R 16V 100N PM10
2210	223878615649	CER2 0603 X7R 16V 100N PM10
2211	223878615649	CER2 0603 X7R 16V 100N PM10
2213	223878615649	CER2 0603 X7R 16V 100N PM10
2214	223878615649	CER2 0603 X7R 16V 100N PM10
2215	223878615649	CER2 0603 X7R 16V 100N PM10
2216	223878615649	CER2 0603 X7R 16V 100N PM10
2217	223878615649	CER2 0603 X7R 16V 100N PM10
2219	223878615649	CER2 0603 X7R 16V 100N PM10
2301	223878615649	CER2 0603 X7R 16V 100N PM10
2302	222224119876	CER2 1206 Y5V 10V 10U P8020
2303	223886715229	CER1 0603 NP0 50V 22P PM5
2304	223886715229	CER1 0603 NP0 50V 22P PM5
2305	223886715101	CER1 0603 NP0 50V 100P PM5
2307	223886715101	CER1 0603 NP0 50V 100P PM5
2308	223886715101	CER1 0603 NP0 50V 100P PM5
2322	223878615649	CER2 0603 X7R 16V 100N PM10
2341	223878615649	CER2 0603 X7R 16V 100N PM10
2412	222224119876	CER2 1206 Y5V 10V 10U P8020
2413	223878615649	CER2 0603 X7R 16V 100N PM10
2415	202203100422	ELCAP PF 6V3 S 680U PM20
2416	222224119876	CER2 1206 Y5V 10V 10U P8020
2417	223878615649	CER2 0603 X7R 16V 100N PM10
2421	222224119876	CER2 1206 Y5V 10V 10U P8020
2422	223878615649	CER2 0603 X7R 16V 100N PM10
2423	223878615649	CER2 0603 X7R 16V 100N PM10
2424	223878615649	CER2 0603 X7R 16V 100N PM10
2425	223878615649	CER2 0603 X7R 16V 100N PM10
2431	222224119876	CER2 1206 Y5V 10V 10U P8020
2432	223878615649	CER2 0603 X7R 16V 100N PM10
2433	223878615649	CER2 0603 X7R 16V 100N PM10
2434	223878615649	CER2 0603 X7R 16V 100N PM10
2435	223878615649	CER2 0603 X7R 16V 100N PM10
2436	223878615649	CER2 0603 X7R 16V 100N PM10
2437	223878615649	CER2 0603 X7R 16V 100N PM10
2438	223878615649	CER2 0603 X7R 16V 100N PM10
2441	223878615649	CER2 0603 X7R 16V 100N PM10
2442	223878615649	CER2 0603 X7R 16V 100N PM10
2501	223878615649	CER2 0603 X7R 16V 100N PM10
2502	223878615649	CER2 0603 X7R 16V 100N PM10
2506	223878615649	CER2 0603 X7R 16V 100N PM10
2507	223878615649	CER2 0603 X7R 16V 100N PM10
2508	202203100414	ELCAP RGA 16V S 220U PM20
2534	223858615636	CER2 0603 X7R 50V 10N PM10
2536	202203100413	ELCAP RGA 50V S 10U PM20
2537	223878615649	CER2 0603 X7R 16V 100N PM10
2541	223878615649	CER2 0603 X7R 16V 100N PM10
2542	222224119876	CER2 1206 Y5V 10V 10U P8020
2543	202202001017	ELCAP SM 10V S 100U PM20
2544	223878615649	CER2 0603 X7R 16V 100N PM10
2545	223878615649	CER2 0603 X7R 16V 100N PM10
2546	222224119876	CER2 1206 Y5V 10V 10U P8020
2547	222224119876	CER2 1206 Y5V 10V 10U P8020
2548	223878615649	CER2 0603 X7R 16V 100N PM10

3201	232270260101	RST SM 0603 RC21 100R PM5
3202	232270260101	RST SM 0603 RC21 100R PM5
3203	232270260101	RST SM 0603 RC21 100R PM5
3204	232270260101	RST SM 0603 RC21 100R PM5
3205	232270260222	RST SM 0603 RC21 2K2 PM5
3206	232270260222	RST SM 0603 RC21 2K2 PM5
3207	232270260102	RST SM 0603 RC21 1K PM5
3210	232270260689	RST SM 0603 RC21 68R PM5
3211	232270260689	RST SM 0603 RC21 68R PM5
3212	232270467509	RST SM 0603 RC22H 75R PM1
3213	232270260689	RST SM 0603 RC21 68R PM5
3214	232270260689	RST SM 0603 RC21 68R PM5
3215	232270467509	RST SM 0603 RC22H 75R PM1
3216	232270260689	RST SM 0603 RC21 68R PM5
3217	232270260689	RST SM 0603 RC21 68R PM5
3218	232270467509	RST SM 0603 RC22H 75R PM1
3219	232270260689	RST SM 0603 RC21 68R PM5
3241	212211805631	RST SM 0603 JUMP. MAX 0R05
3243	212211805631	RST SM 0603 JUMP. MAX 0R05
3302	232270260105	RST SM 0603 RC21 1M PM5
3303	232270260101	RST SM 0603 RC21 100R PM5
3304	232270260101	RST SM 0603 RC21 100R PM5
3306	212211805678	RST SM 0603 RC0603 47K PM5
3307	212211805669	RST SM 0603 RC0603 10K PM5
3308	232270260101	RST SM 0603 RC21 100R PM5
3309	232270260101	RST SM 0603 RC21 100R PM5
3310	232270260101	RST SM 0603 RC21 100R PM5
3311	212211805631	RST SM 0603 JUMP. MAX 0R05
3312	232270260472	RST SM 0603 RC21 4K7 PM5
3313	212211805631	RST SM 0603 JUMP. MAX 0R05
3314	232270260472	RST SM 0603 RC21 4K7 PM5
3320	232270260472	RST SM 0603 RC21 4K7 PM5
3322	212211805669	RST SM 0603 RC0603 10K PM5
3323	232270260101	RST SM 0603 RC21 100R PM5
3324	212211805631	RST SM 0603 JUMP. MAX 0R05
3325	212211805631	RST SM 0603 JUMP. MAX 0R05
3342	232270260472	RST SM 0603 RC21 4K7 PM5
3343	232270260472	RST SM 0603 RC21 4K7 PM5
3345	232270260101	RST SM 0603 RC21 100R PM5
3346	232270260101	RST SM 0603 RC21 100R PM5
3401	232270260101	RST SM 0603 RC21 100R PM5
3402	232270260101	RST SM 0603 RC21 100R PM5
3403	212211805637	RST SM 0603 RC0603 22R PM5
3404	212211805637	RST SM 0603 RC0603 22R PM5
3405	212211805637	RST SM 0603 RC0603 22R PM5
3406	232270260101	RST SM 0603 RC21 100R PM5
3407	232270260101	RST SM 0603 RC21 100R PM5
3408	212211805637	RST SM 0603 RC0603 22R PM5
3411	232270468201	RST SM 0603 RC22H 820R PM1
3412	232270462702	RST SM 0603 RC22H 2K7 PM1
3501	212211805639	RST SM 0603 RC0603 47R PM5
3502	212211805639	RST SM 0603 RC0603 47R PM5
3503	212211805639	RST SM 0603 RC0603 47R PM5
3513	232270260101	RST SM 0603 RC21 100R PM5
3514	232270260101	RST SM 0603 RC21 100R PM5
3515	232270260102	RST SM 0603 RC21 1K PM5
3516	232270260829	RST SM 0603 RC21 82R PM5
3517	232270260829	RST SM 0603 RC21 82R PM5
3518	212211805669	RST SM 0603 RC0603 10K PM5
3519	212211805669	RST SM 0603 RC0603 10K PM5
3521	212211805669	RST SM 0603 RC0603 10K PM5
3522	212211805669	RST SM 0603 RC0603 10K PM5
3523	212211805669	RST SM 0603 RC0603 10K PM5
3531	212211805972	RST SM 1206 JUMP. MAX 0R05
3533	212211805678	RST SM 0603 RC0603 47K PM5
3534	232270260104	RST SM 0603 RC21 100K PM5
3535	212211805669	RST SM 0603 RC0603 10K PM5

5210	242254945579	IND FXD 1206 EMI 100MHZ 100R
5211	242254943769	IND FXD 0603 EMI 100MHZ 30R
5212	242254943769	IND FXD 0603 EMI 100MHZ 30R
5213	242254943769	IND FXD 0603 EMI 100MHZ 30R
5415	242254900113	IND FXD 0603 EMI 100MHZ 1K
5421	242254945579	IND FXD 1206 EMI 100MHZ 100R
5431	242254945579	IND FXD 1206 EMI 100MHZ 100R
5501	242254944196	IND FXD 0805 EMI 100MHZ 120R
5502	242254944196	IND FXD 0805 EMI 100MHZ 120R
5503	242254944196	IND FXD 0805 EMI 100MHZ 120R
5507	242254945579	IND FXD 1206 EMI 100MHZ 100R
5535	242254945579	IND FXD 1206 EMI 100MHZ 100R

6201	933137390215	DIO REG SM BZX84-C5V1 (PHSE)
6204	933137390215	DIO REG SM BZX84-C5V1 (PHSE)
6205	933137390215	DIO REG SM BZX84-C5V1 (PHSE)
6206	933137390215	DIO REG SM BZX84-C5V1 (PHSE)
6301	932205042685	DIO SIG SM BAV99LG (ONSE)
6302	932205042685	DIO SIG SM BAV99LG (ONSE)
6303	933976370215	DIO SIG SM BAT54C (PHSE)

7301	313815865511	CPU IC ASSY
7301	932220582682	IC SM NT68F633L (NOVA)
7341	313815865521	EEPROM ASSY-LPL
7341	932218650682	IC AT24C16A-10PU-2.7 (ATME)
7401	932222435671	IC SM NT68521AEFG (NOVA)
7518	932217439685	TRA SIG SM BC857C (KEC0)
7519	932217439685	TRA SIG SM BC857C (KEC0)
7531	932216638668	FET POW SM SI5441DC-E3 (VISH)
7532	932217440685	TRA SIG SM KRC102S (KEC0)
7541	932222077668	IC SM AME1117ECGTZ (AME0)
7545	932222076668	IC SM AME1117CCGTZ (AME0)

PCB Assy

1053	313815863771	CONTROL ASSY

3902	212211805678	RST SM 0603 RC0603 47K PM5
3903	212211805669	RST SM 0603 RC0603 10K PM5
3904	232270260102	RST SM 0603 RC21 1K PM5
3905	212211805678	RST SM 0603 RC0603 47K PM5
3906	212211805669	RST SM 0603 RC0603 10K PM5
3907	232270260102	RST SM 0603 RC21 1K PM5

6910	932222562682	LED VS L-115WSYKCGKW* (KIEL)
6911	932222562682	LED VS L-115WSYKCGKW* (KIEL)

Different Parts List

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Diversity of 190C6FS/93 compared with 190C6FS/00

Item	12NC	Description
	863900016679	190C6FS/93
0030	313815760651	FRONT BEZEL ASSY
0291	313815568491	LABEL-CPU
0450	313815641231	CARTON
0615	313811708971	HEX CODE OF F/W(TEMP IS 9300K)
1051	313815865991	SCALER ASSY - QDI
1051	313815866001	SCALER ASSY - LPL
1157	313818871651	MAINSCORD CCEE 10A 1M8 DET BK
7301	313815866011	CPU IC ASSY

Diversity of 190C6FS/78 compared with 190C6FS/00

Item	12NC	Description
	863900017122	190C6FS/78
0100	313815167571	AL FOIL
0101	313815137881	EMI SHIELDING
0126	313815569651	RATING LABEL
0127	313815555711	HI-POT LABEL
0129	313810632613	PE BAG
0130	313815567431	SCREEN STICKER
0141	313815524481	QUICK SETUP GUIDE
0210	313800991951	PROCESS BOX
0290	313800991961	PROCESS BOX
0301	313815137472	METAL FRAME
0450	313815642321	CARTON
0453	313815642331	P.E. BAG
0505	313815642321	CARTON
0602	313811708562	E-D.F.U.
1050	823827718291	LCD LM190E03-TLB4
1052	313819875992	PSU OPENFR IPS 43W(EADP-43AF A
1157	313818879601	MAINSCORD BRZ 10A 1M53 BK
1201	242202518432	SOC SUBD H 15P F SBFR Y

Diversity of 190C6FS/96 compared with 190C6FS/00

Item	12NC	Description
	863900017298	190C6FS/96
0126	313815568023	RATING LABEL
0210	313800991951	PROCESS BOX
0290	313800991961	PROCESS BOX
0301	313815137472	METAL FRAME
0490	313815682811	PACKING ASSY-CHINA
0505	313815640391	CARTON
0602	313811708562	E-D.F.U.
1050	932222951682	TFT-LCD LM190E03-TLB2 (LGPH) B
1052	313819875992	PSU OPENFR IPS 43W(EADP-43AF A
1157	823827732108	1M5 MAINSCORD TWN 7A 3P B
1201	242202518432	SOC SUBD H 15P F SBFR Y